FIG. 1

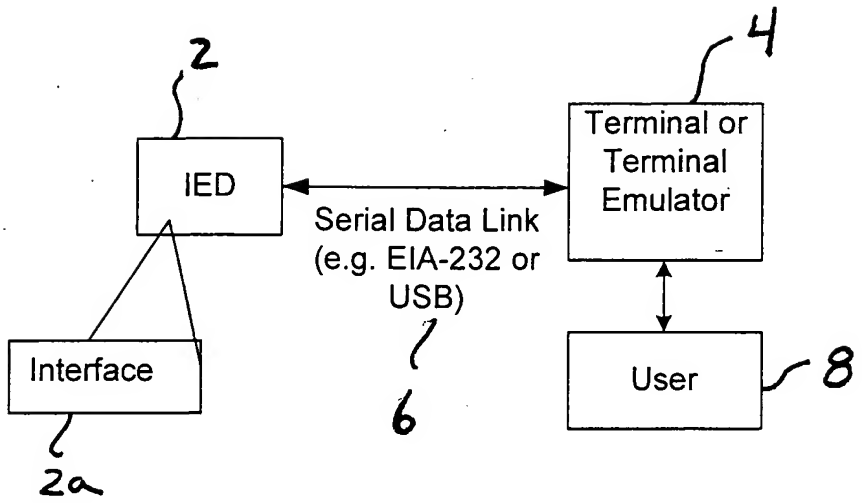
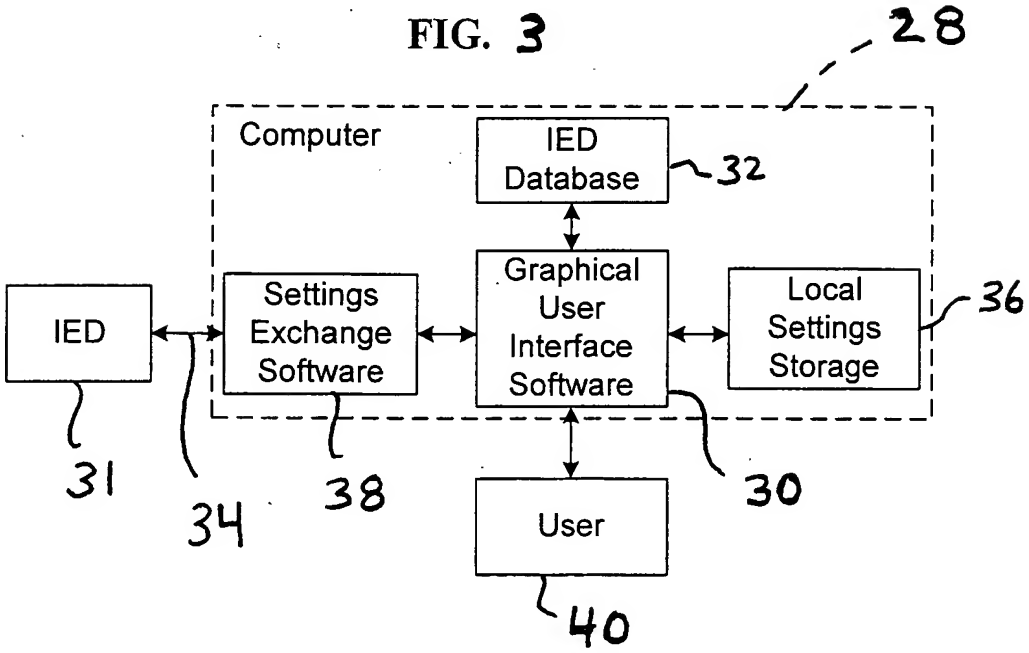

2
IED
Interface
2a
Serial Data Link
(e.g. EIA-232 or
USB)
6
4
Terminal or
Terminal
Emulator
User
8

FIG. 3


28
Computer
IED
Database
32
IED
Settings
Exchange
Software
Graphical
User
Interface
Software
Local
Settings
Storage
36
31
34
38
30
User
40

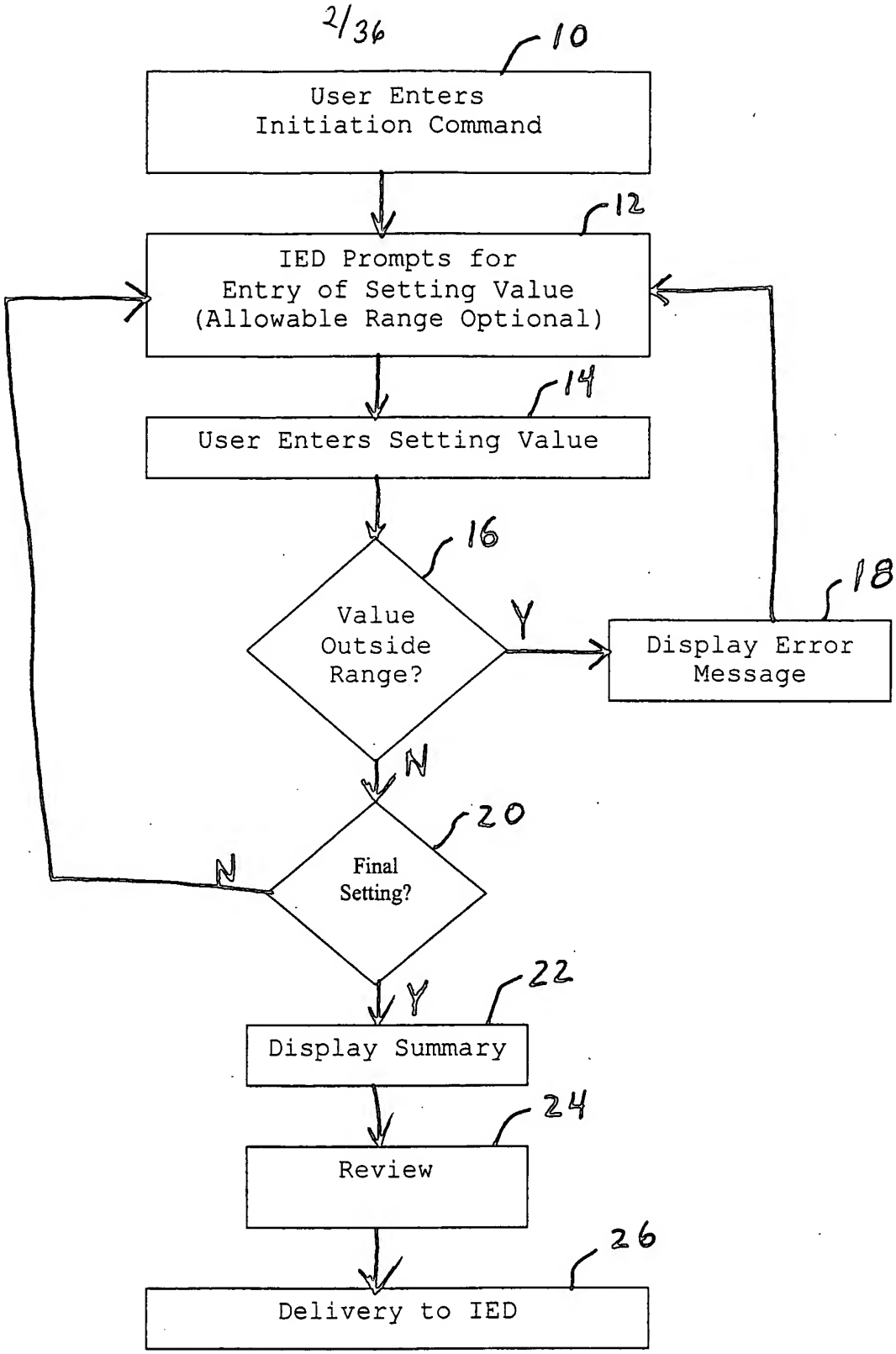
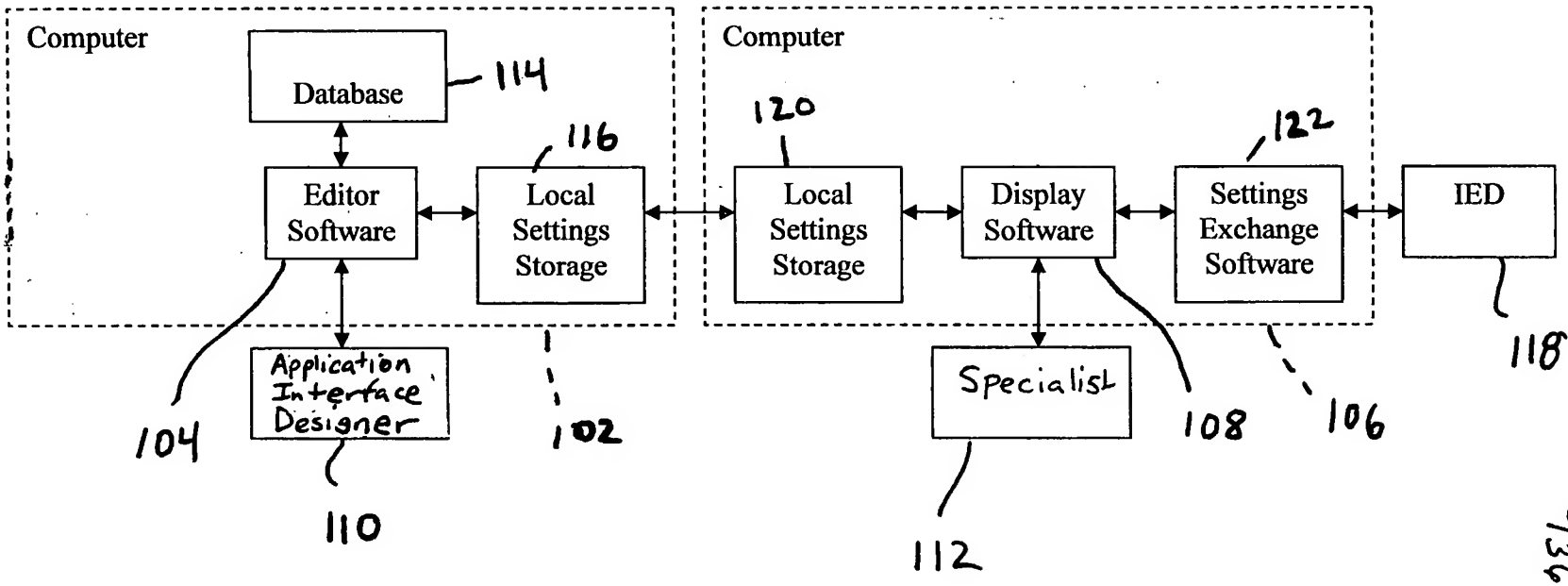

10
User Enters Initiation Command
12
IED Prompts for Entry of Setting Value (Allowable Range Optional)
14
User Enters Setting Value
16
Value Outside Range?
Y
18
Display Error Message
N
20
Final Setting?
N
Y
22
Display Summary
24
Review
26
Delivery to IED

FIG. 2

FIG. 4


100
Computer
Database
114
116
Editor Software
Local Settings Storage
Application Interface Designer
104
102
110
Computer
120
122
Local Settings Storage
Display Software
Settings Exchange Software
IED
118
Specialist
108
106
112

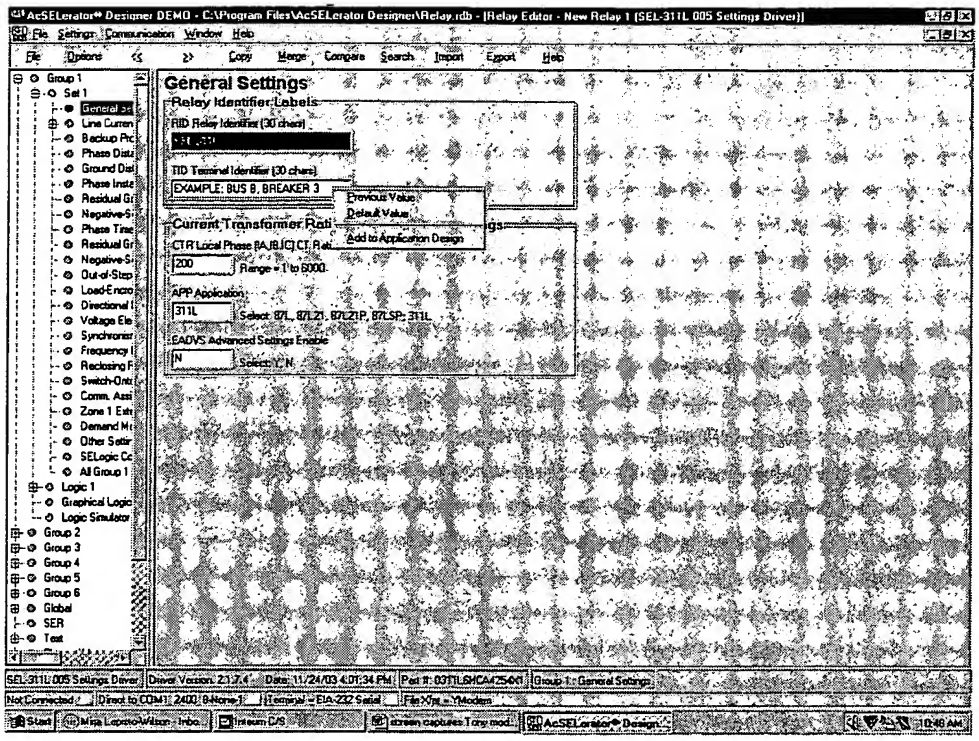

AcSELerator® Designer DEMO - C:\Program Files\AcSELerator Designer\Relay.rdb - [Relay Editor - New Relay 1 (SEL-311L 005 Settings Driver)]
File Settings Communication Window Help
File Options Copy Merge Compare Search Import Export Help
General Settings
Relay Identifier Labels
RID Relay Identifier (30 chars)
TID Terminal Identifier (30 chars)
EXAMPLE: BUS B, BREAKER 3
Previous Value
Default Value
Add to Application Design
Current Transformer Rati
CTR Local Phase [A,B,C] CT Rati
200
Range = 1 to 6000
APP Application
311L
Select: 87L, 87L2I, 87L2IP, 87LSP, 311L
EADVS Advanced Settings Enable
N
Select: Y, N
Group 1
Set 1
Logic 1
Graphical Logic
Logic Simulator
Group 2
Group 3
Group 4
Group 5
Group 6
Global
SER
Test

FIG. 5A

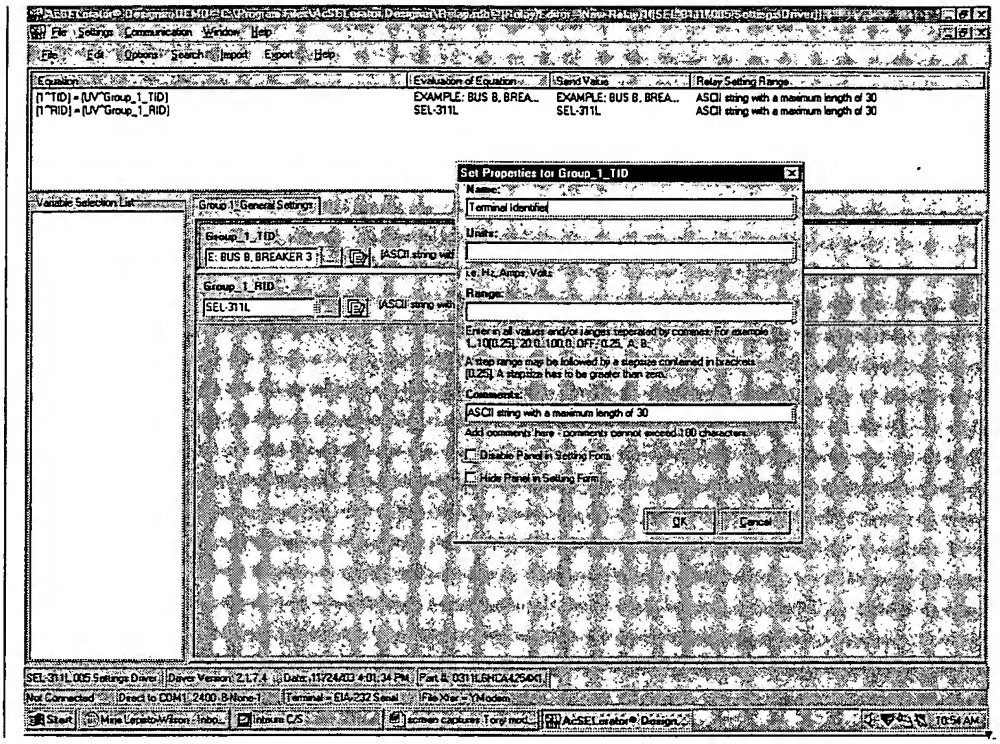

File Settings Communication Window Help
File Edit Options Search Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
[1^TID] = [UV^Group_1_TID]
[1^RID] = [UV^Group_1_RID]
EXAMPLE: BUS B, BREA...
SEL-311L
EXAMPLE: BUS B, BREA...
SEL-311L
ASCII string with a maximum length of 30
ASCII string with a maximum length of 30
Variable Selection List
Group 1 General Settings
Group_1_TID
E: BUS B, BREAKER 3
Group_1_RID
SEL-311L
Set Properties for Group_1_TID
Name:
Terminal Identifier
Units:
i.e. Hz, Amps, Volts
Range:
Enter all values and/or ranges separated by commas. For example:
1..10[0.25], 20.0..100.0, OFF, 0.25, A, B
A step range may be followed by a stepsize contained in brackets
[0.25]. A stepsize has to be greater than zero.
Comments:
ASCII string with a maximum length of 30
Add comments here - comments cannot exceed 100 characters.
Disable Panel in Setting Form
Hide Panel in Setting Form
OK
Cancel
Not Connected
Direct to COM1: 2400-8-None-1
Terminal - EIA-232 Serial
File Xfer - YModem
Start
Intouch CS
AcSELerator Design
10:54 AM

FIG. 5B

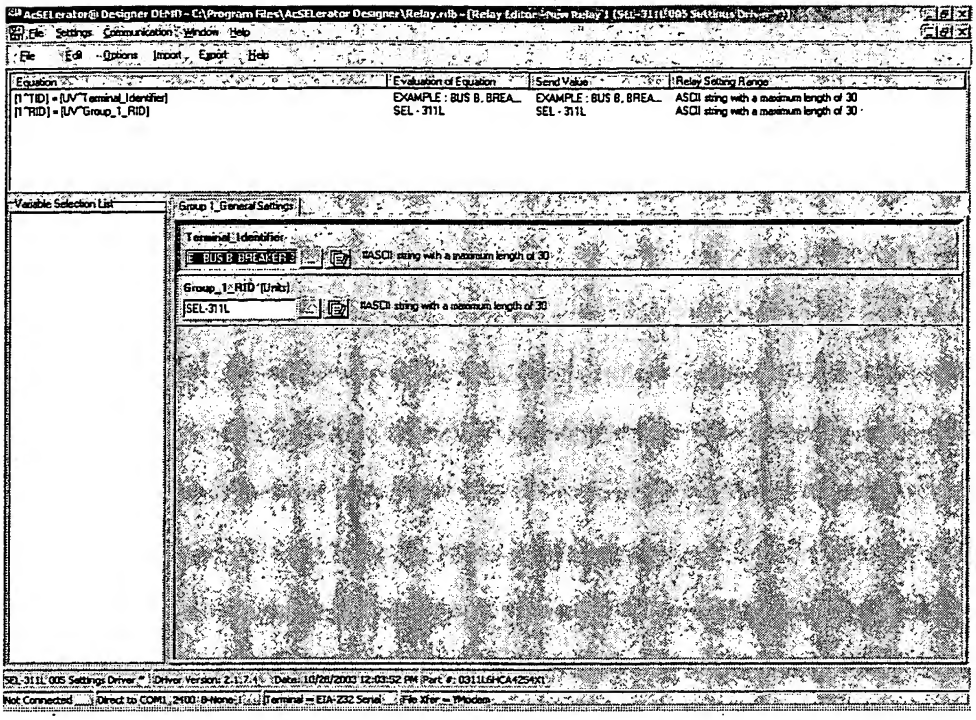

AcSELerator® Designer DEMO - C:\Program Files\AcSELerator Designer\Relay.mlb - [Relay Editor - New Relay 1 (SEL-311L 005 Settings Driver)]
File Settings Communication Window Help
File Edit Options Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
[1^TID] = [UV^Terminal_Identifier]
[1^RID] = [UV^Group_1_RID]
EXAMPLE : BUS B, BREA...
SEL - 311L
EXAMPLE : BUS B, BREA...
SEL - 311L
ASCII string with a maximum length of 30
ASCII string with a maximum length of 30
Variable Selection List
Group 1_General Settings
Terminal_Identifier
BUS B BREAKER
ASCII string with a maximum length of 30
Group_1_RID (Units)
SEL-311L
ASCII string with a maximum length of 30
SEL-311L 005 Settings Driver
Driver Version: 2.1.7.4
Date: 10/28/2003 12:03:52 PM
Part #: 0311L6HCA4254X1
Not Connected
Direct to COM1, 2400, 8-None-1
Terminal = EIA-232 Serial
File Xfer = YModem

FIG. 5C

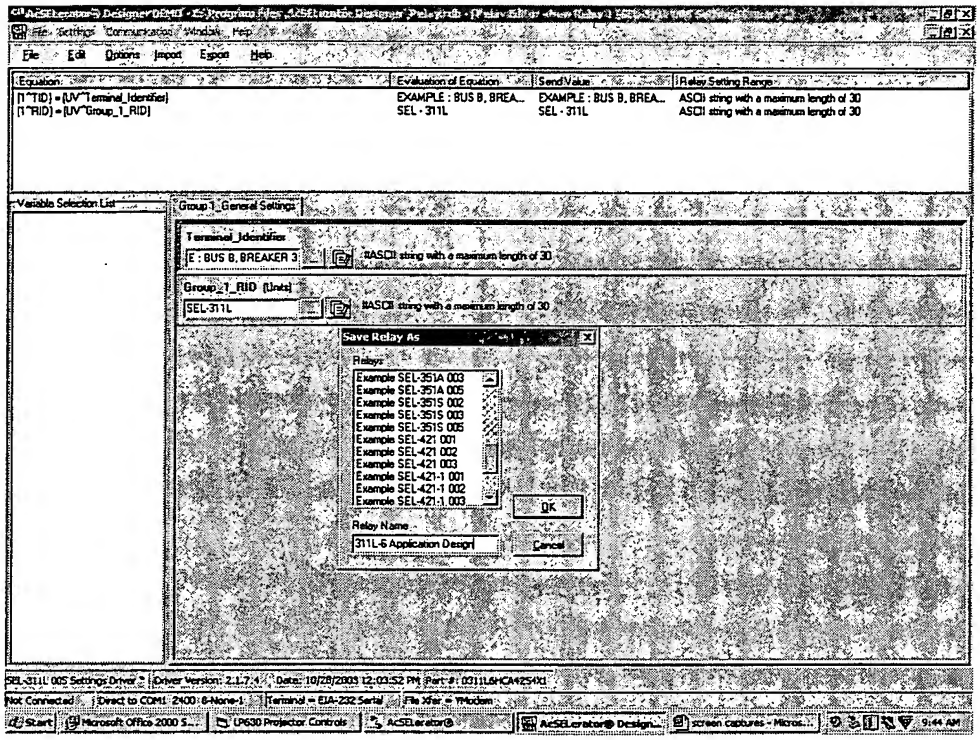

File Settings Communications Window Help
File Edit Options Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
[1^TID] = [UV^Terminal_Identifier]
[1^RID] = [UV^Group_1_RID]
EXAMPLE : BUS B, BREA...
SEL - 311L
EXAMPLE : BUS B, BREA...
SEL - 311L
ASCII string with a maximum length of 30
ASCII string with a maximum length of 30
Variable Selection List
Group 1 General Settings
Terminal_Identifier
E : BUS B, BREAKER 3
ASCII string with a maximum length of 30
Group_1_RID (Units)
SEL-311L
ASCII string with a maximum length of 30
Save Relay As
Relays:
Example SEL-351A 003
Example SEL-351A 005
Example SEL-351S 002
Example SEL-351S 003
Example SEL-351S 005
Example SEL-421 001
Example SEL-421 002
Example SEL-421 003
Example SEL-421-1 001
Example SEL-421-1 002
Example SEL-421-1 003
OK
Cancel
Relay Name:
311L-6 Application Design
Not Connected
Direct to COM1 2400 8-None-1
Terminal - EIA-232 Serial
File Xfer - YModem
Start
Microsoft Office 2000 S...
LP630 Projector Controls
ACSELerator®
ACSELerator® Design...
screen captures - Micros...
9:44 AM

FIG. 5D

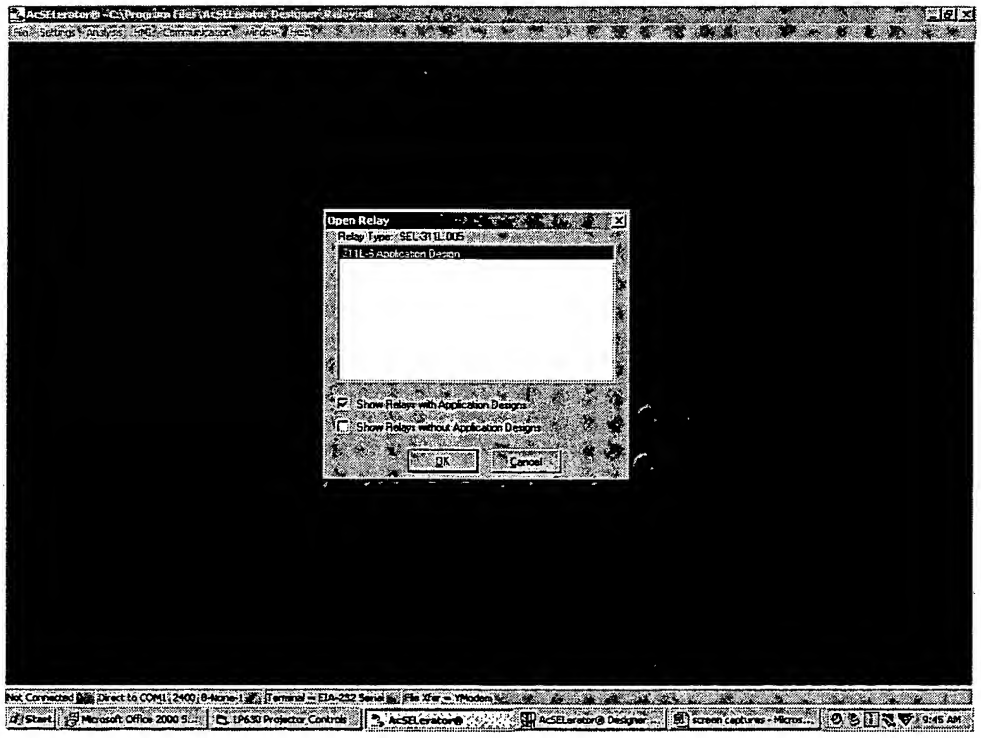
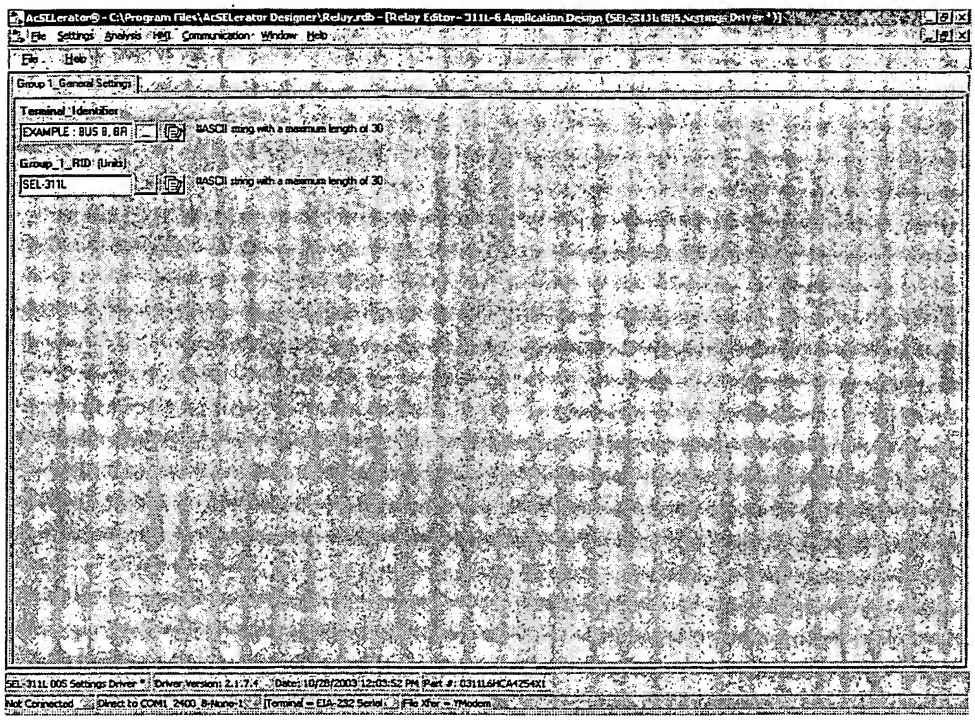

Open Relay
Relay Type: SEL-311L-005
311L-5 Application Design
Show Relays with Application Designs
Show Relays without Application Designs
OK
Cancel

FIG. 5E

FIG. 5F


AcSELerator® - C:\Program Files\AcSELerator Designer\Relay.rdb - [Relay Editor - 311L-6 Application Design (SEL-311L 005 Settings Driver *)]
File Settings Analysis HMI Communication Window Help
File Help
Group_1_General Settings
Terminal_Identifier
EXAMPLE : BUS B, BA
[ASCII string with a maximum length of 30
Group_1_RID (Unit)
SEL-311L
[ASCII string with a maximum length of 30
SEL-311L 005 Settings Driver *
Driver Version: 2.1.7.4
Date: 10/28/2003 12:03:52 PM
Part #: 0311LAHCA1254XX
Not Connected
Direct to COM1, 2400, 8-None-1
Terminal – EIA-232 Serial
File Xfer – YModem

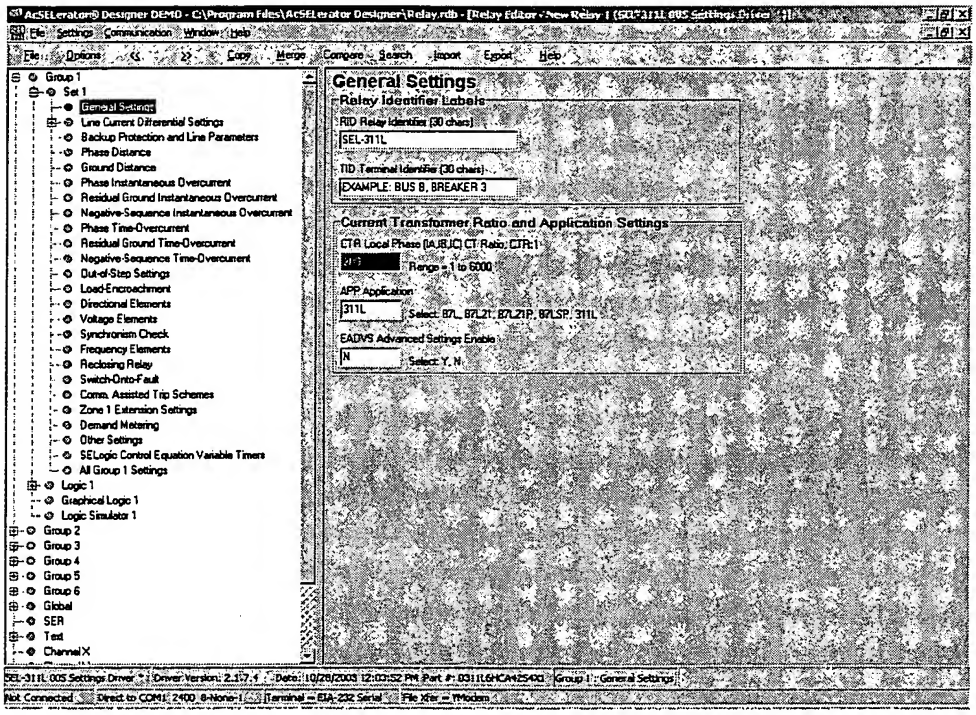

AcSELerator® Designer DEMO - C:\Program Files\AcSELerator Designer\Relay.rdb - [Relay Editor - New Relay 1 (SEL-311L 005 Settings Driver)]
File Settings Communication Window Help
File Options Copy Merge Compare Search Import Export Help
Group 1
Set 1
General Settings
Line Current Differential Settings
Backup Protection and Line Parameters
Phase Distance
Ground Distance
Phase Instantaneous Overcurrent
Residual Ground Instantaneous Overcurrent
Negative-Sequence Instantaneous Overcurrent
Phase Time-Overcurrent
Residual Ground Time-Overcurrent
Negative-Sequence Time-Overcurrent
Out-of-Step Settings
Load-Encroachment
Directional Elements
Voltage Elements
Synchronism Check
Frequency Elements
Reclosing Relay
Switch-Onto-Fault
Comm. Assisted Trip Schemes
Zone 1 Extension Settings
Demand Metering
Other Settings
SELogic Control Equation Variable Timers
All Group 1 Settings
Logic 1
Graphical Logic 1
Logic Simulator 1
Group 2
Group 3
Group 4
Group 5
Group 6
Global
SER
Test
ChannelX
General Settings
Relay Identifier Labels
RID Relay Identifier (30 chars)
SEL-311L
TID Terminal Identifier (30 chars)
EXAMPLE: BUS B, BREAKER 3
Current Transformer Ratio and Application Settings
CTR Local Phase (A,B,C) CT Ratio: CTR1
Range = 1 to 6000
APP Application
311L
Select: 87L, 87L21, 87L21P, 87LSP, 311L
EADVS Advanced Settings Enable
N
Select: Y, N
SEL-311L 005 Settings Driver
Driver Version: 2.107.4
Date: 10/28/2003 12:03:52 PM Part #: 031L6HCAH2540X
Group 1
General Settings
Not Connected
Direct to COM1: 2400, 8-None-1
Terminal – EIA-232 Serial
File Xfer – Modem

FIG. 6A

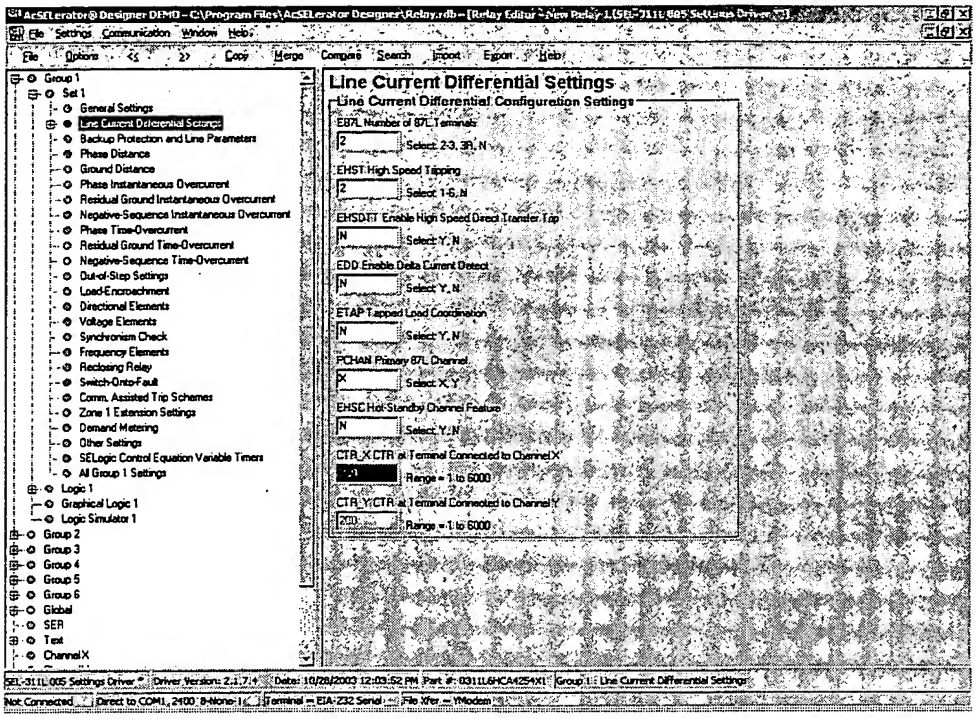

ACSELerator® Designer DEMO - C:\Program Files\ACSELerator Designer\Relay.rdb - [Relay Editor - New Relay 1 (SEL-311L 005 Settings Driver)]
File Settings Communication Window Help
File Options << >> Copy Merge Compare Search Import Export Help
Group 1
Set 1
General Settings
Line Current Differential Settings
Backup Protection and Line Parameters
Phase Distance
Ground Distance
Phase Instantaneous Overcurrent
Residual Ground Instantaneous Overcurrent
Negative-Sequence Instantaneous Overcurrent
Phase Time-Overcurrent
Residual Ground Time-Overcurrent
Negative-Sequence Time-Overcurrent
Out-of-Step Settings
Load-Encroachment
Directional Elements
Voltage Elements
Synchronism Check
Frequency Elements
Reclosing Relay
Switch-Onto-Fault
Comm. Assisted Trip Schemes
Zone 1 Extension Settings
Demand Metering
Other Settings
SELogic Control Equation Variable Timers
All Group 1 Settings
Logic 1
Graphical Logic 1
Logic Simulator 1
Group 2
Group 3
Group 4
Group 5
Group 6
Global
SER
Text
ChannelX
Line Current Differential Settings
Line Current Differential Configuration Settings
E87L Number of 87L Terminals
2
Select: 2-3, 3R, N
EHST High Speed Tripping
2
Select: 1-6, N
EHSDTT Enable High Speed Direct Transfer Trip
N
Select: Y, N
EDD Enable Delta Current Detect
N
Select: Y, N
ETAP Tapped Load Coordination
N
Select: Y, N
PCHAN Primary 87L Channel
X
Select: X, Y
EHSC Hot-Standby Channel Feature
N
Select: Y, N
CTR_X CTR at Terminal Connected to ChannelX
Range = 1 to 6000
CTR_Y CTR at Terminal Connected to ChannelY
200
Range = 1 to 6000
SEL-311L 005 Settings Driver
Driver Version: 2.1.7.1
Date: 10/28/2003 12:03:52 PM
Part #: 0311L6HCA4254X1
Group 1 : Line Current Differential Settings
Not Connected
Direct to COM1, 2400, 8-None-1
Terminal - EIA-232 Serial
File Xfer - YModem

FIG. 6B

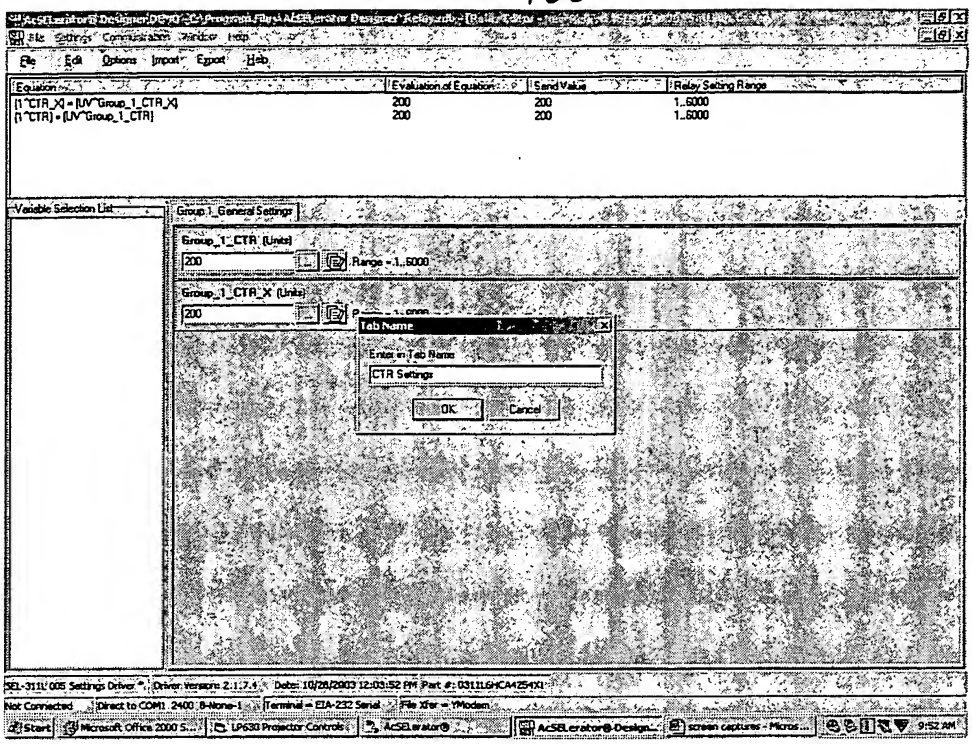

File Edit Options Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
[1^CTR_X] = [UV^Group_1_CTR_X]
[1^CTR] = [UV^Group_1_CTR]
200
200
1..6000
Variable Selection List
Group 1 General Settings
Group_1_CTR (Units)
Range = 1..6000
Group_1_CTR_X (Units)
Tab Name
Enter a Tab Name
CTR Settings
OK
Cancel

FIG. 6C

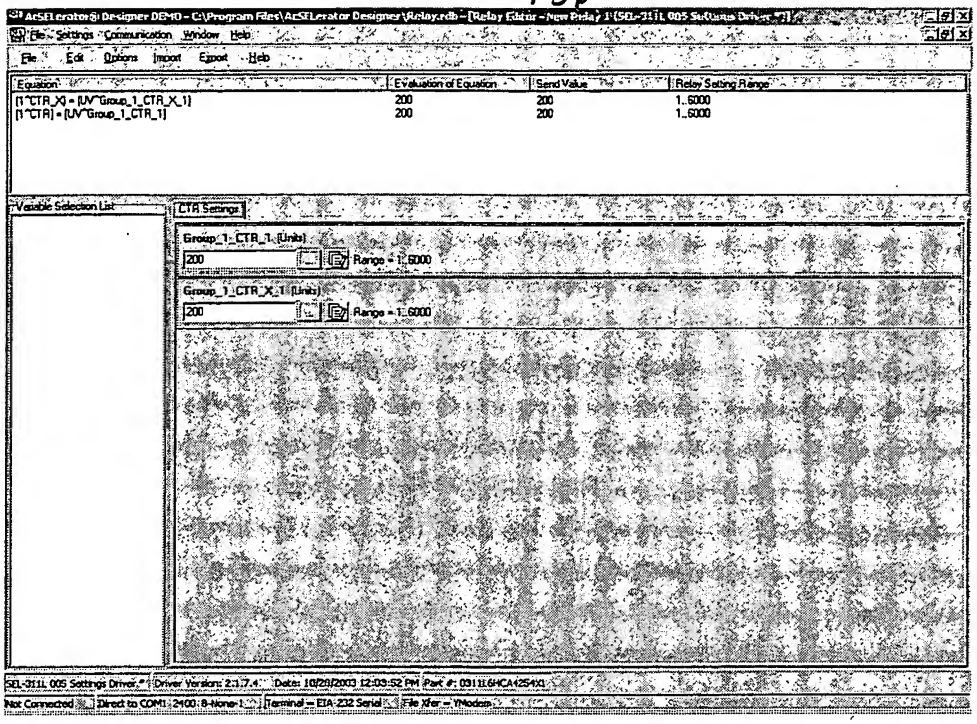

ArSELerator® Designer DEMO - C:\Program Files\ArSELerator Designer\Relay.rdb - [Relay Editor - New Relay 1 (SEL-311L 005 Settings Driver v2)]
File Settings Communication Window Help
File Edit Options Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
(1^CTR_X) = (UV^Group_1_CTR_X_1)
(1^CTR) = (UV^Group_1_CTR_1)
200
200
200
200
1..6000
1..6000
Variable Selection List
CTR Settings
Group_1_CTR_1 (Units)
200
Range = 1..6000
Group_1_CTR_X_1 (Units)
200
Range = 1..6000
SEL-311L 005 Settings Driver
Driver Version: 2.1.7.4
Date: 10/29/2003 12:09:52 PM
Part #: 0311L6HCA12540
Not Connected
Direct to COM1: 2400 8-None-1
Terminal – EIA-232 Serial
File Xfer – YModem

FIG. 6D

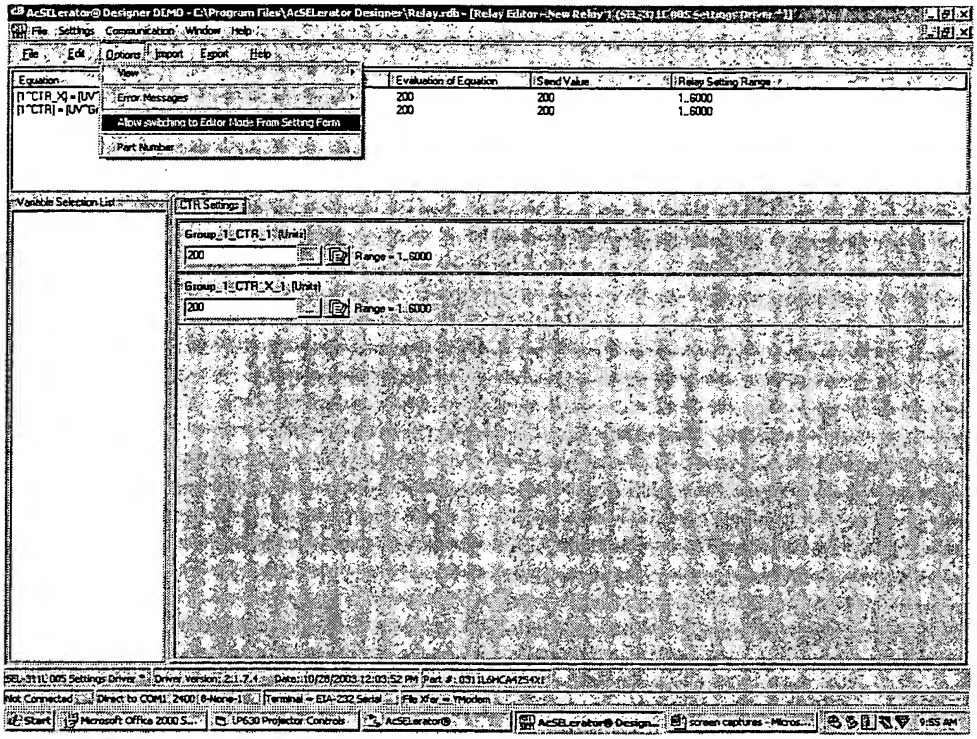

AcSELerator® Designer DEMO - C:\Program Files\AcSELerator Designer\Relay.rdb - [Relay Editor - New Relay 1 (SEL-351 LC 005 Settings Driver -1)]
File Settings Communication Window Help
File Edit Options Import Export Help
View
Error Messages
Allow switching to Editor Mode From Setting Form
Part Number
Equation
Evaluation of Equation
Send Value
Relay Setting Range
200 200 1..6000
200 200 1..6000
Variable Selection List
CTR Settings
Group_1 CTR_1 (Units)
200
Range = 1..6000
Group_1 CTR_X_1 (Units)
200
Range = 1..6000
Not Connected
Start
Microsoft Office 2000 S...
LP630 Projector Controls
AcSELerator®
AcSELerator® Design...
Screen captures - Micros...
9:55 AM

FIG. 6E

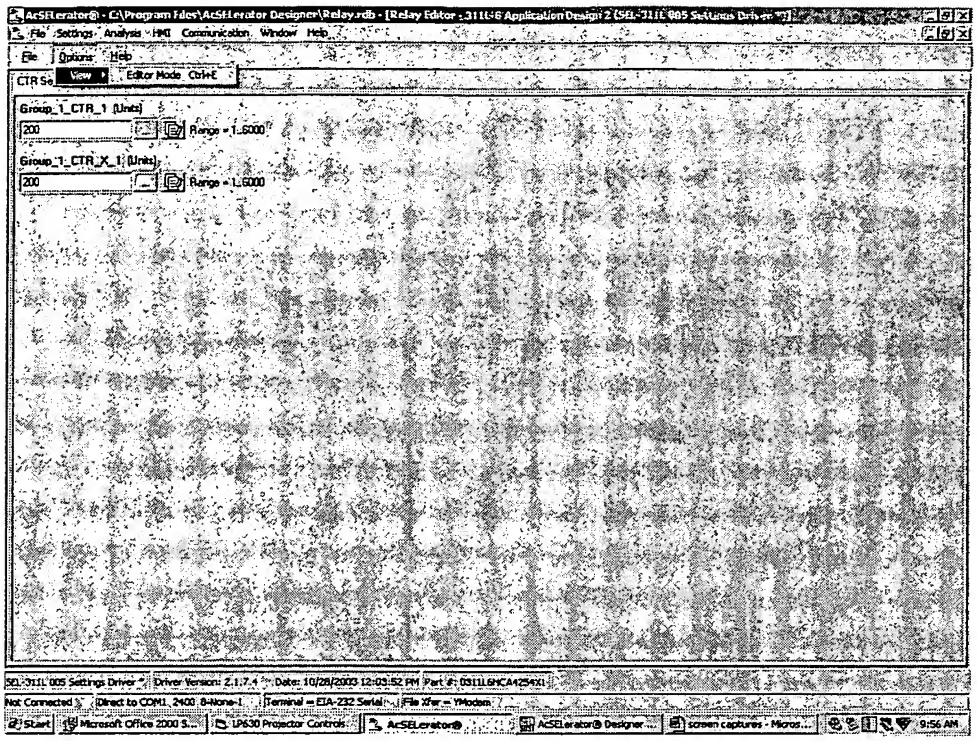

Group_1_CTR_1 (Units)
200
Range = 1..6000
Group_1_CTR_X_1 (Units)
200
Range = 1..6000
Editor Mode Ctrl+E

FIG. 6F

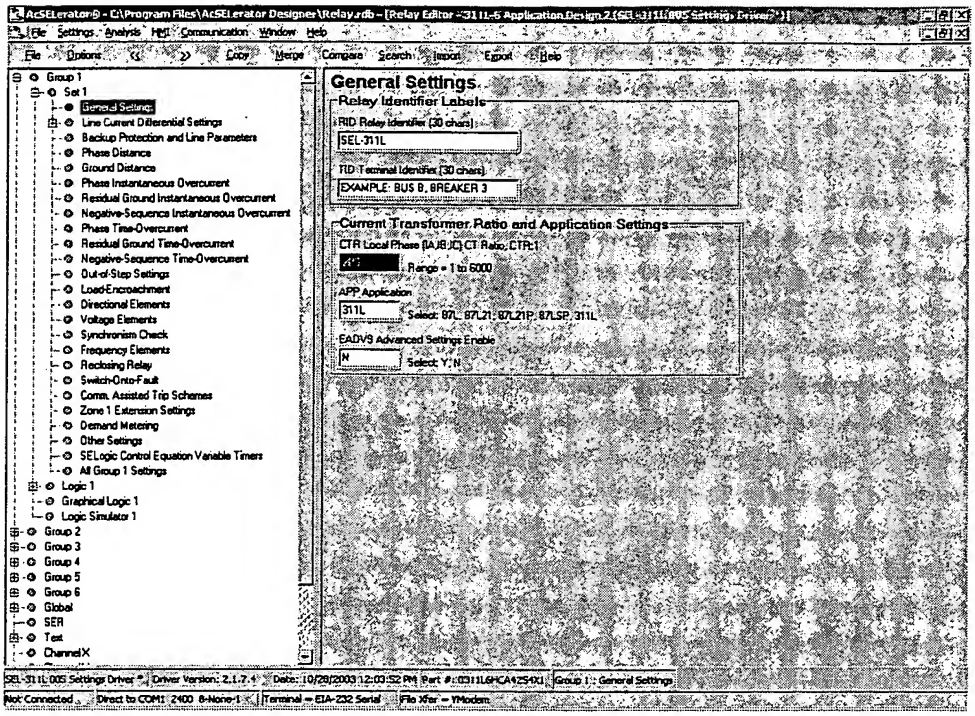

AcSELerator® - C:\Program Files\AcSELerator Designer\Relay.rdb - [Relay Editor - 311L-5 Application Design 2 (SEL-311L-005 Settings Driver)]
File Settings Analysis HMI Communication Window Help
File Options Copy Merge Compare Search Import Export Help
Group 1
Set 1
General Settings
Line Current Differential Settings
Backup Protection and Line Parameters
Phase Distance
Ground Distance
Phase Instantaneous Overcurrent
Residual Ground Instantaneous Overcurrent
Negative-Sequence Instantaneous Overcurrent
Phase Time-Overcurrent
Residual Ground Time-Overcurrent
Negative-Sequence Time-Overcurrent
Out-of-Step Settings
Load-Encroachment
Directional Elements
Voltage Elements
Synchronism Check
Frequency Elements
Reclosing Relay
Switch-Onto-Fault
Comm. Assisted Trip Schemes
Zone 1 Extension Settings
Demand Metering
Other Settings
SELogic Control Equation Variable Timers
All Group 1 Settings
Logic 1
Graphical Logic 1
Logic Simulator 1
Group 2
Group 3
Group 4
Group 5
Group 6
Global
SER
Test
ChannelX
General Settings
Relay Identifier Labels
RID Relay Identifier (30 chars)
SEL-311L
TID Terminal Identifier (30 chars)
EXAMPLE: BUS B, BREAKER 3
Current Transformer Ratio and Application Settings
CTR Local Phase (A,B,C) CT Ratio, CTR:1
Range = 1 to 6000
APP Application
311L
Select: 87L, 87L21, 87L21P, 87LSP, 311L
EADVS Advanced Settings Enable
N
Select: Y,N
SEL-311L-005 Settings Driver
Driver Version: 2.1.7.4
Date: 10/28/2003 12:09:52 PM
Part #: 0311L6HCA4Z5XX
Group 1 : General Settings
Not Connected
Direct to COM1 2400 8-None-1
Terminal – EIA-232 Serial
File Xfer – YModem

FIG. 6G

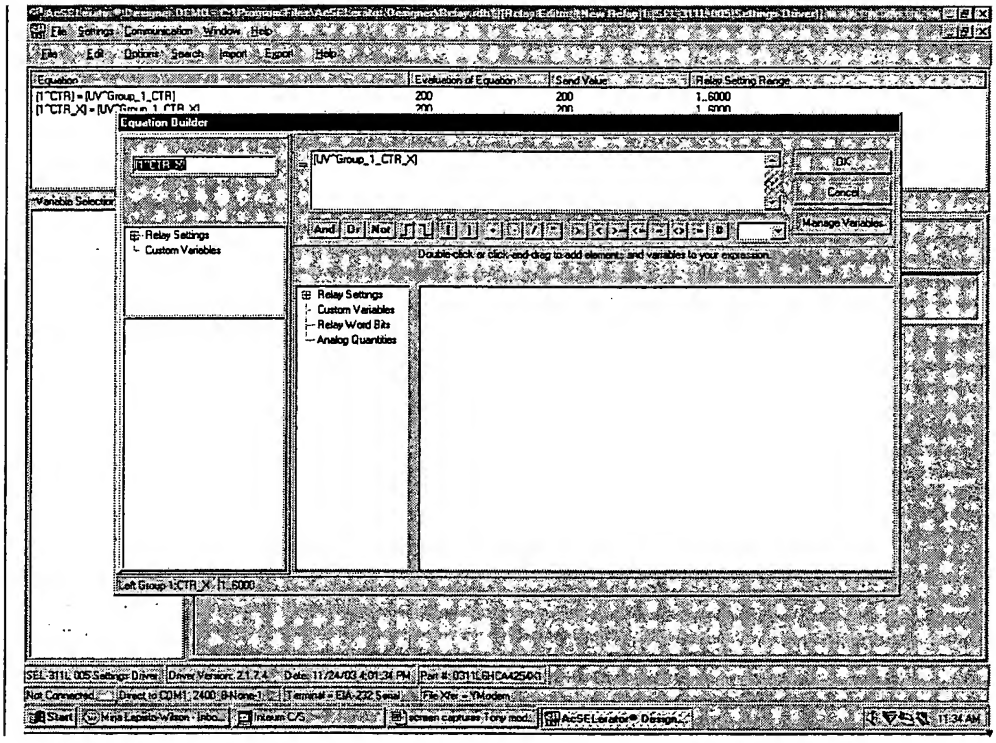

Equation
Evaluation of Equation
Send Value
Relay Setting Range
200
200
1..6000
Equation Builder
[UV]Group_1_CTR_X]
OK
Cancel
Manage Variables...
And
Or
Not
Double-click or click-and-drag to add elements and variables to your expression.
Relay Settings
Custom Variables
Relay Word Bits
Analog Quantities
Left Group 1:CTR_X: 1..6000
Start

FIG. 7A

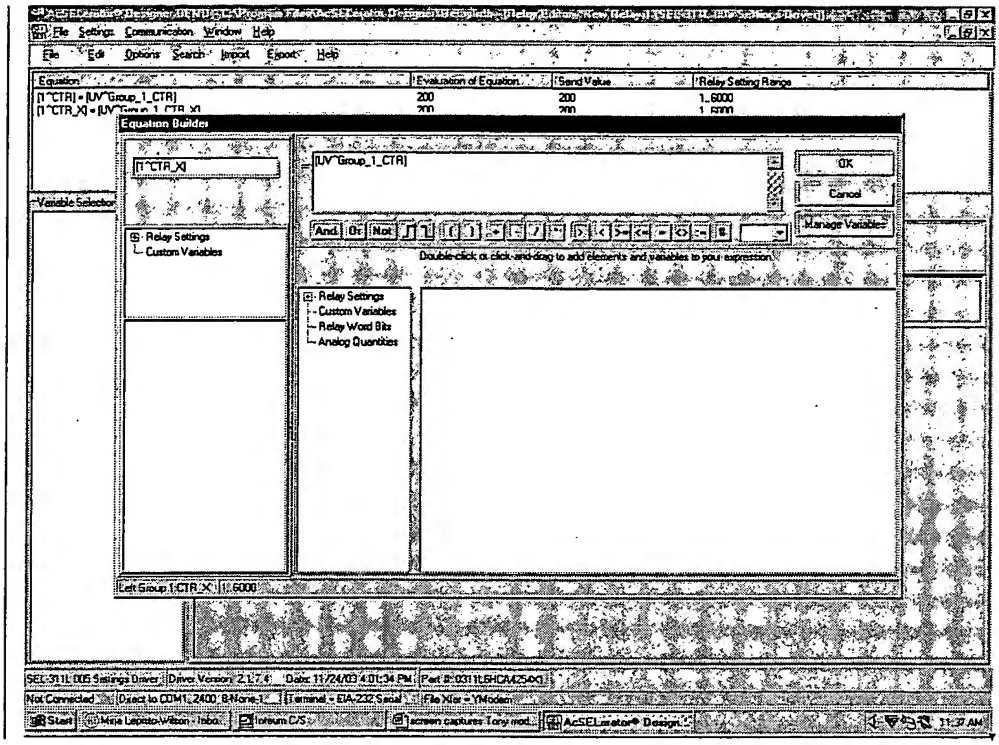

File Settings Communication Window Help
File Edit Options Search Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
Equation Builder
Variable Selector
Relay Settings
Custom Variables
Relay Word Bits
Analog Quantities
OK
Cancel
Manage Variables
And Or Not
Double-click or click-and-drag to add elements and variables to your expression.

FIG. 7B

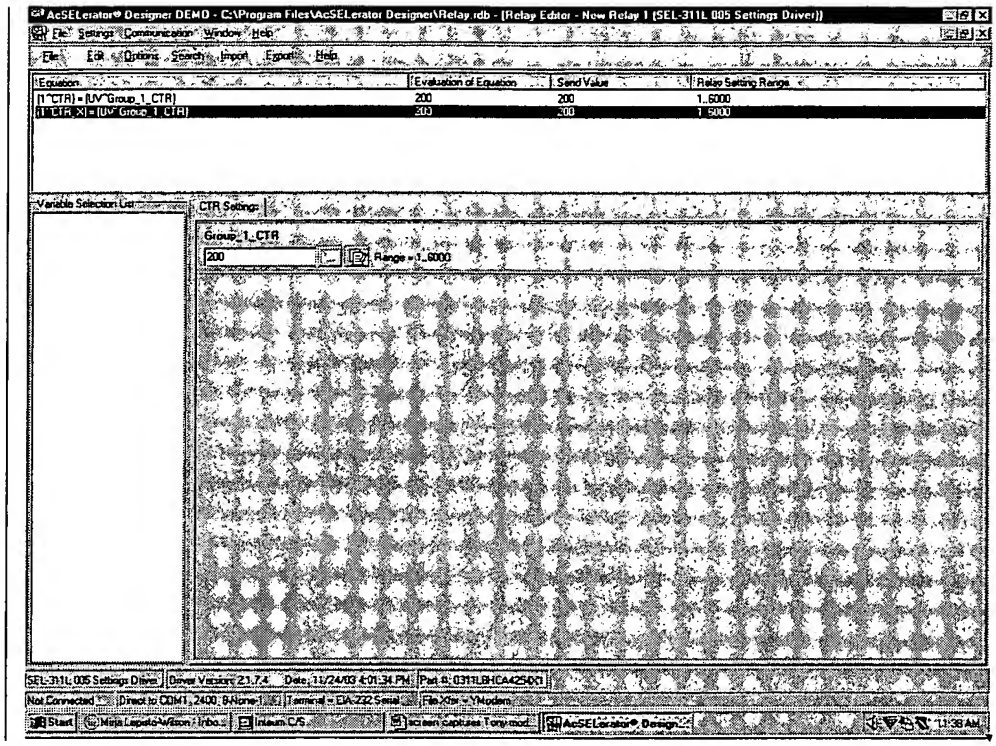

AcSELerator® Designer DEMO - C:\Program Files\AcSELerator Designer\Relay.rdb - [Relay Editor - New Relay 1 (SEL-311L 005 Settings Driver)]
File Settings Communication Window Help
File Edit Options Search Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
(1^CTR) = [UV^Group_1_CTR)
(1^CTR_X) = [UV^Group_1_CTR)
Variable Selection List
CTR Settings:
Group_1_CTR
200
Range = 1..6000
SEL-311L 005 Settings Driver
Driver Version: 21.7.4
Date: 11/24/03 4:01:34 PM
Not Connected
Direct to COM1, 2400, 8-None-1
Terminal - EIA-232 Serial
File Xfer - YModem
Start
AcSELerator® Designer

FIG. 7C

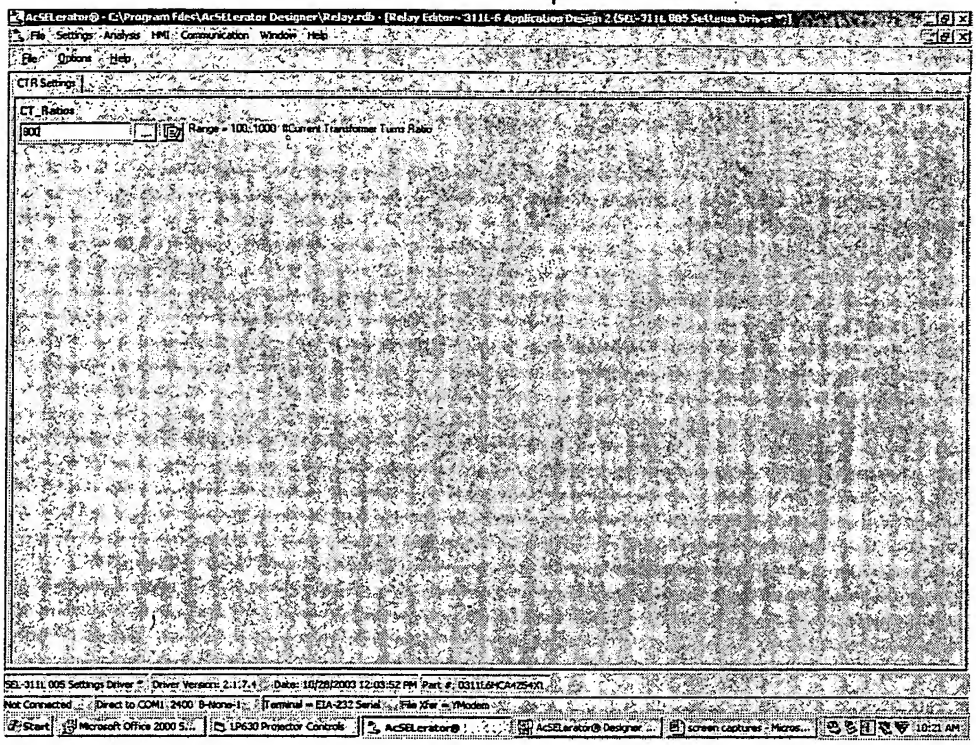

File Settings Analysis HMI Communication Window Help
File Options Help
CTR Settings
CT_Ratios
800
Range = 100:1000 :Current Transformer Turns Ratio
Start
Microsoft Office 2000 S...
LP630 Projector Controls
AcSELerator®
AcSELerator® Designer ...
screen captures - Micros...
10:21 AM

FIG. 7D

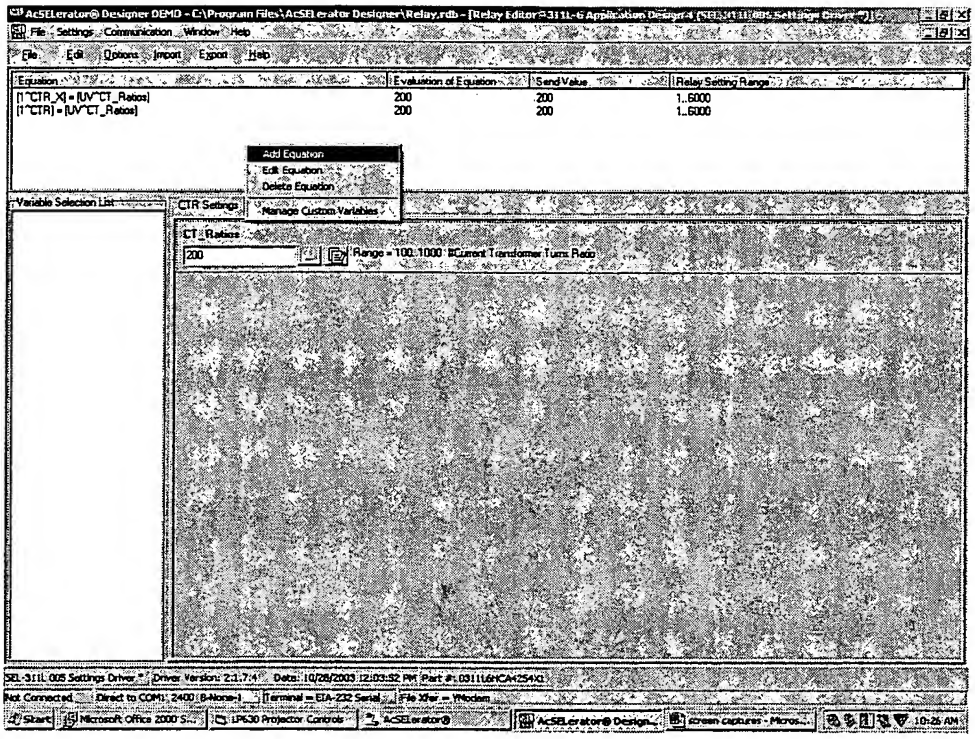

AcSELerator® Designer DEMO - C:\Program Files\AcSELerator Designer\Relay.rdb - [Relay Editor 311L-6 Application Designer]
File Settings Communication Window Help
File Edit Options Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
[1^CTR_X] = [UV^CT_Ratios]
200
200
1..6000
[1^CTR] = [UV^CT_Ratios]
200
200
1..6000
Add Equation
Edit Equation
Delete Equation
Manage Custom Variables
Variable Selection List
CTR Settings
CT Ratios
200
Range = 100..1000 #Current Transformer Turns Ratio
SEL-311L 005 Settings Driver
Not Connected
Direct to COM1, 2400 (8-None-1
Terminal = EIA-232 Serial
File Xfer = Modem
Start
Microsoft Office 2000 S...
LP630 Projector Controls
AcSELerator®
AcSELerator® Design...
screen captures - Micros...
10:26 AM

FIG. 8A

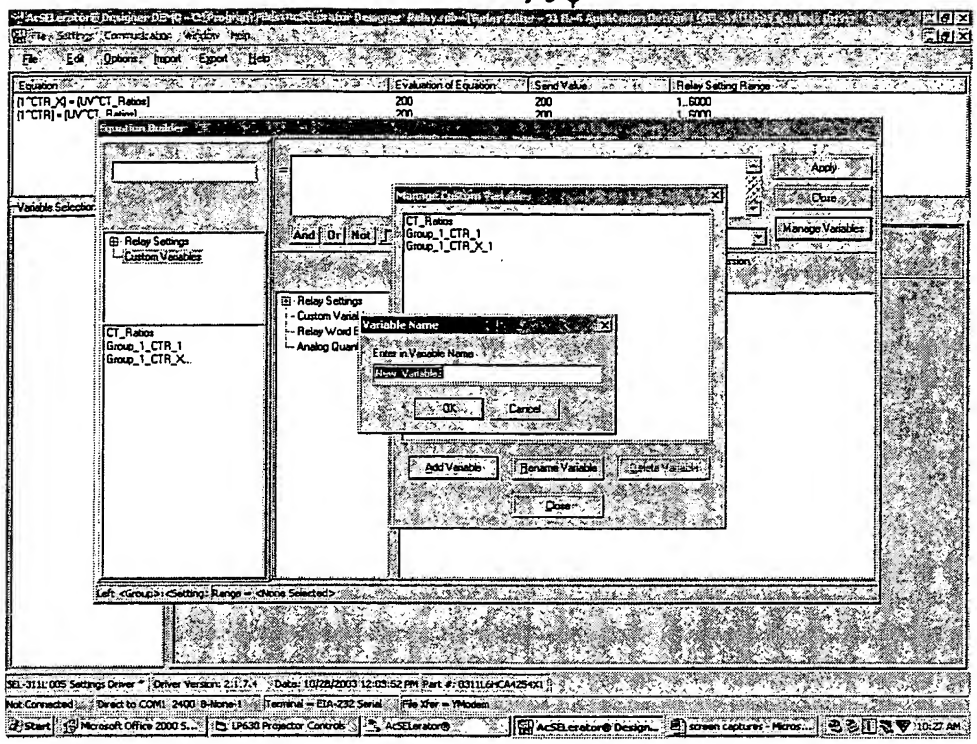

Equation
Evaluation of Equation
Send Value
Relay Setting Range
Equation Builder
Variable Selection
Apply
Close
Manage Variables
Relay Settings
Custom Variables
CT_Ratios
Group_1_CTR_1
Group_1_CTR_X_1
And
Or
Not
Variable Name
Enter in Variable Name
New Variable
OK
Cancel
Add Variable
Rename Variable
Delete Variable
Close

FIG. 8B

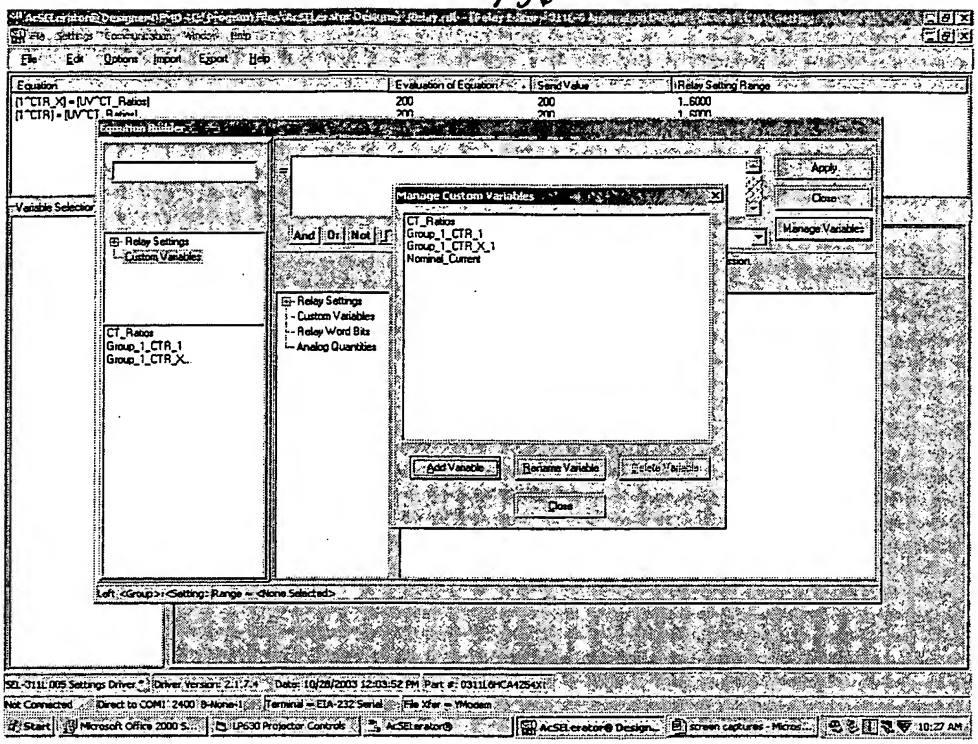

File Edit Options Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
Variable Selector
Relay Settings
Custom Variables
CT_Ratios
Group_1_CTR_1
Group_1_CTR_X_1
Nominal_Current
Manage Custom Variables
Add Variable...
Rename Variable
Delete Variable
Close
Apply
Close
Manage Variables
And
Or
Not

FIG. 8C

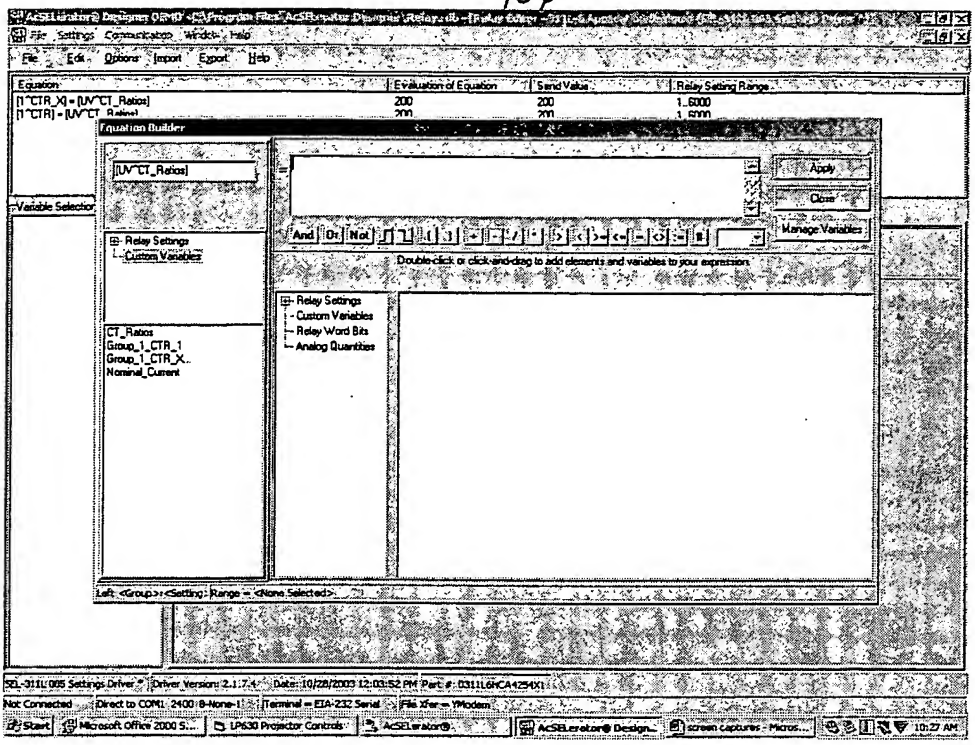

Equation
Evaluation of Equation
Serial Value
Relay Setting Range
Equation Builder
Apply
Close
Manage Variables
And
Or
Not
Relay Settings
Custom Variables
Relay Word Bits
Analog Quantities
CT_Ratios
Group_1_CTR_1
Group_1_CTR_X..
Nominal_Current

FIG. 8D

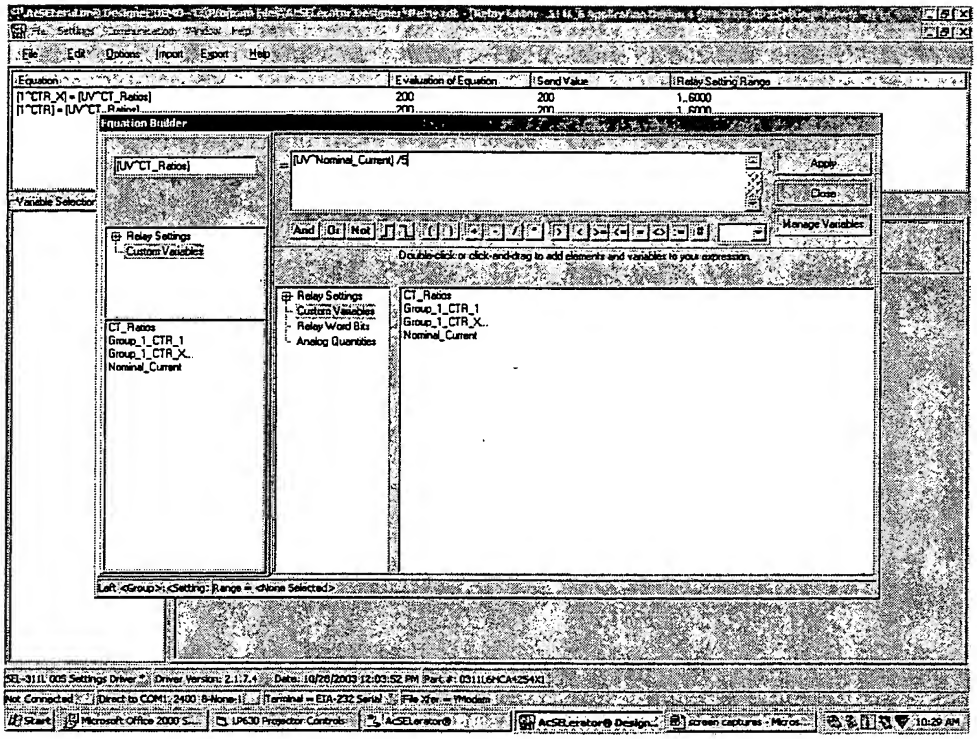

File Edit Options Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
[1^CTR_X] = [UV^CT_Ratios]
200
200
1..6000
Equation Builder
[UV^CT_Ratios]
[UV^Nominal_Current] /5
Apply
Close
Manage Variables
And Or Not
Double-click or click-and-drag to add elements and variables to your expression.
Variable Selector
Relay Settings
Custom Variables
Relay Word Bits
Analog Quantities
CT_Ratios
Group_1_CTR_1
Group_1_CTR_X..
Nominal_Current
Left <Group>:<Setting>: Range = <None Selected>
Not Connected
Direct to COM1; 2400 8-None-1
Terminal - EIA-232 Serial
Start
Microsoft Office 2000 S...
LP630 Projector Controls
ACSELerator®
ACSELerator® Design...
screen captures - Micros...
10:29 AM

FIG. 8E

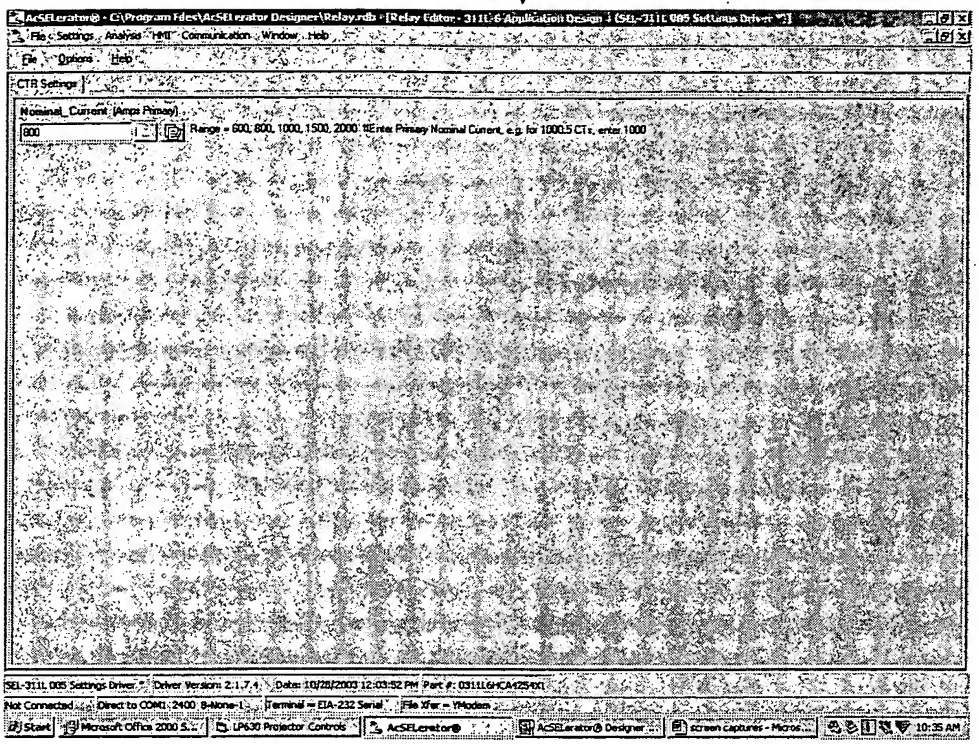

File Settings Analysis HMI Communication Window Help
File Options Help
CTR Settings
Nominal_Current (Amps Primary)
800
Range = 600, 800, 1000, 1500, 2000: Enter Primary Nominal Current, e.g. for 1000:5 CTs, enter 1000
Not Connected
Direct to COM1: 2400 8-None-1
Terminal = EIA-232 Serial
File Xfer = YModem
Start
Microsoft Office 2000 S...
LP630 Projector Controls
AcSELerator®
AcSELerator® Designer
screen captures - Micros...
10:35 AM

FIG. 8F

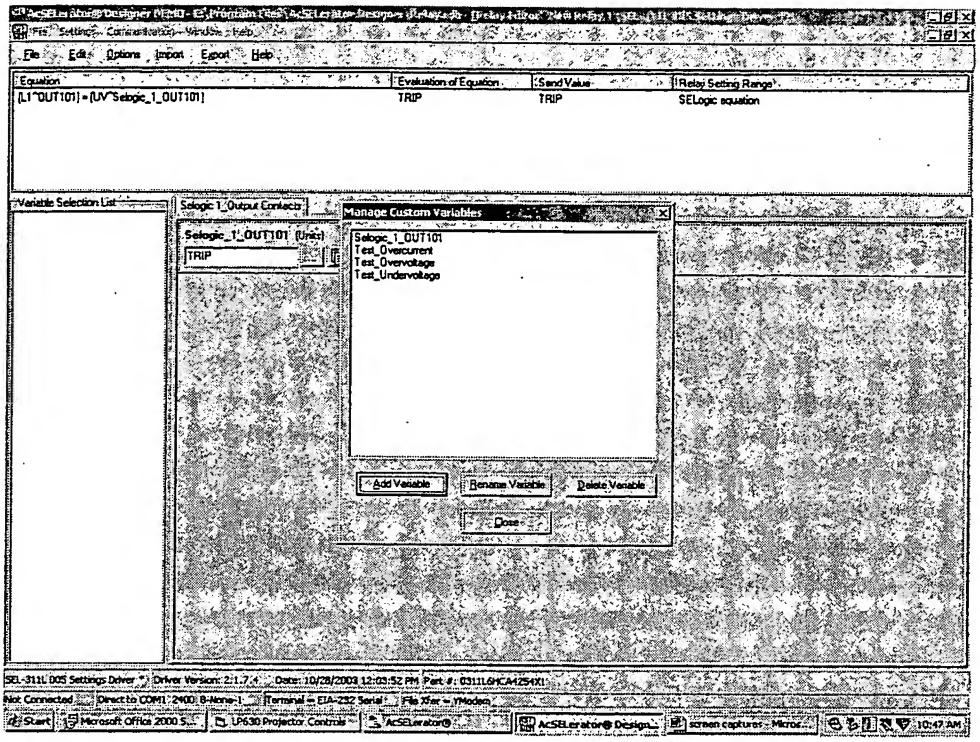

File Edit Options Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
[L1 "OUT101] = [UV"Selogic_1_OUT101]
TRIP
TRIP
SELogic equation
Variable Selection List
Selogic 1 Output Contacts
Selogic_1_OUT101 (Unrst)
TRIP
Manage Custom Variables
Selogic_1_OUT101
Test_Overcurrent
Test_Overvoltage
Test_Undervoltage
Add Variable
Rename Variable
Delete Variable
Close

FIG. 9A

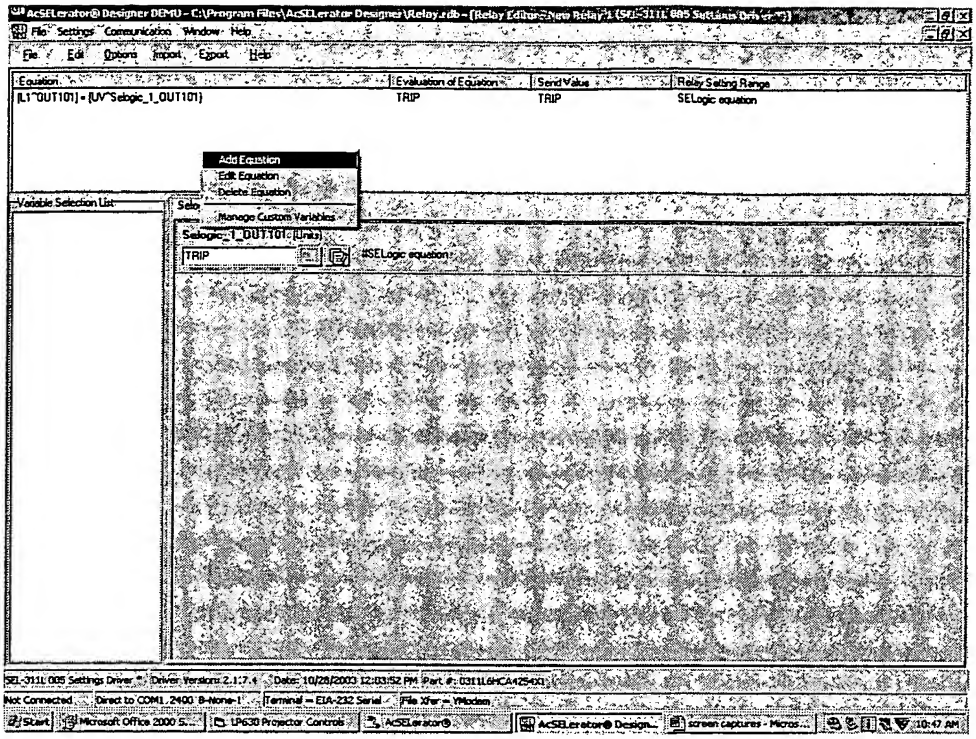

Equation
Evaluation of Equation
Send Value
Relay Setting Range
TRIP
TRIP
SELogic equation
Add Equation
Edit Equation
Delete Equation
Manage Custom Variables
Variable Selection List
TRIP
#SELogic equation

FIG. 9B

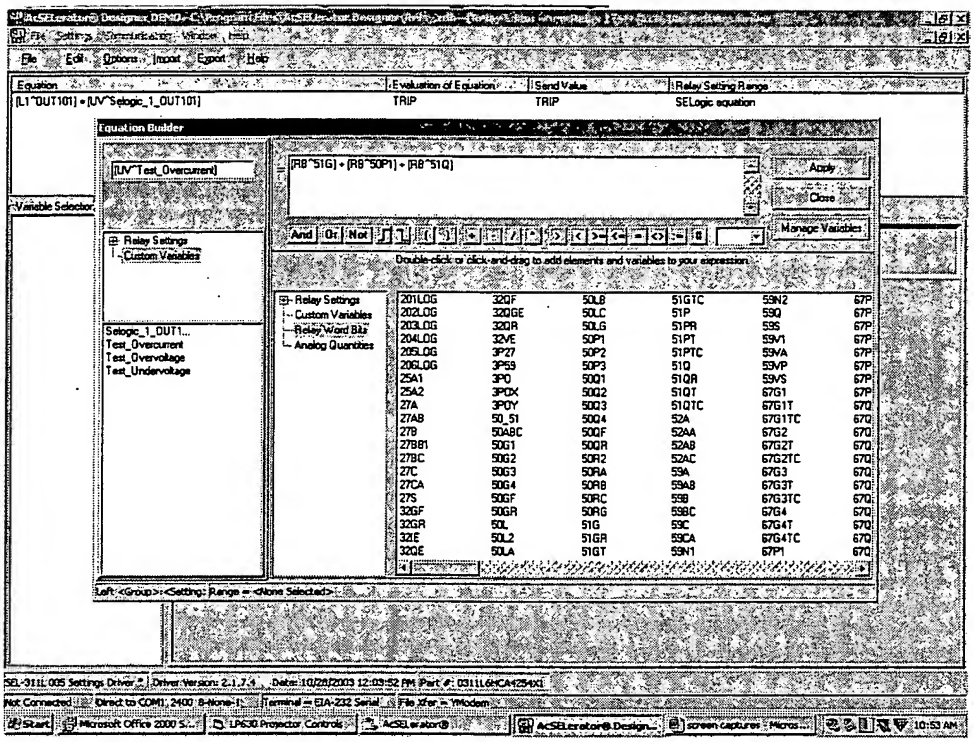

Equation
Evaluation of Equation
Send Value
Relay Setting Range
[L1^OUT101] + [UV^Selogic_1_OUT101]
TRIP
TRIP
SELogic equation
Equation Builder
[UV^Test_Overcurrent]
[R8^51G] + [R8^50P1] + [R8^51Q]
Apply
Close
Manage Variables
And
Or
Not
Double-click or click-and-drag to add elements and variables to your expression.
Variable Selector
Relay Settings
Custom Variables
Selogic_1_OUT1...
Test_Overcurrent
Test_Overvoltage
Test_Undervoltage
Relay Word Bits
Analog Quantities
201LOG 32QF 50L8 51GTC 59N2 67P
202LOG 32QGE 50LC 51P 59Q 67P
203LOG 32QR 50LG 51PR 59S 67P
204LOG 32VE 50P1 51PT 59V1 67P
205LOG 3P27 50P2 51PTC 59VA 67P
206LOG 3P59 50P3 51Q 59VP 67P
25A1 3P0 50Q1 51QR 59VS 67P
25A2 3P0X 50Q2 51QT 67G1 67P
27A 3P0Y 50Q3 51QTC 67G1T 67Q
27AB 50_51 50Q4 52A 67G1TC 67Q
27B 50ABC 50QF 52AA 67G2 67Q
27B81 50G1 50QR 52AB 67G2T 67Q
27BC 50G2 50R2 52AC 67G2TC 67Q
27C 50G3 50RA 59A 67G3 67Q
27CA 50G4 50RB 59AB 67G3T 67Q
27S 50GF 50RC 59B 67G3TC 67Q
32GF 50GR 50RG 59BC 67G4 67Q
32GR 50L 51G 59C 67G4T 67Q
32IE 50L2 51GR 59CA 67G4TC 67Q
32QE 50LA 51GT 59N1 67P1 67Q
Left: <Group>: <Setting: Range = <None Selected>
Not Connected
Direct to COM1; 2400 8-None-1
Terminal = EIA-232 Serial
File Xfer = 'Modem'
Start
Microsoft Office 2000 S...
LPS30 Projector Controls
AcSELerator®
AcSELerator® Design...
screen captures - Micros...
10:53 AM

FIG. 9C

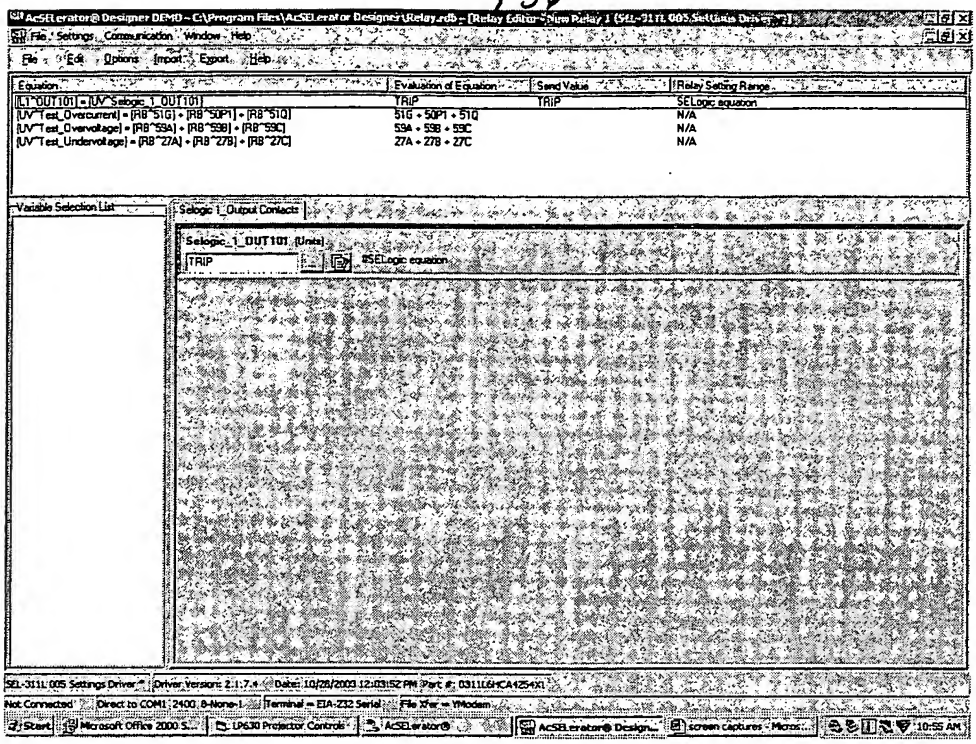

AcSELerator® Designer DEMO - C:\Program Files\AcSELerator Designer\Relay.rdb - [Relay Editor - New Relay 1 (SEL-311L 005 Settings Driver)]
File Settings Communication Window Help
File Edit Options Import Export Help
Equation
Evaluation of Equation
Saved Value
Relay Setting Range
[L1^OUT101] = [UV^Selogic_1_OUT101]
TRIP
TRIP
SELogic equation
[UV^Test_Overcurrent] = [R8^51G] + [R8^50P1] + [R8^51Q]
51G + 50P1 + 51Q
N/A
[UV^Test_Overvoltage] = [R8^59A] + [R8^59B] + [R8^59C]
59A + 59B + 59C
N/A
[UV^Test_Undervoltage] = [R8^27A] + [R8^27B] + [R8^27C]
27A + 27B + 27C
N/A
Variable Selection List
Selogic 1 Output Contacts
Selogic_1_OUT101 (Units)
TRIP
SELogic equation
SEL-311L 005 Settings Driver
Not Connected
Direct to COM1, 2400, 8-None-1
Terminal - EIA-232 Serial
File Xfer - YModem
Start
Microsoft Office 2000 S...
LP530 Projector Controls
AcSELerator®
AcSELerator® Design...
screen captures - Micros...
10:55 AM

FIG. 9D

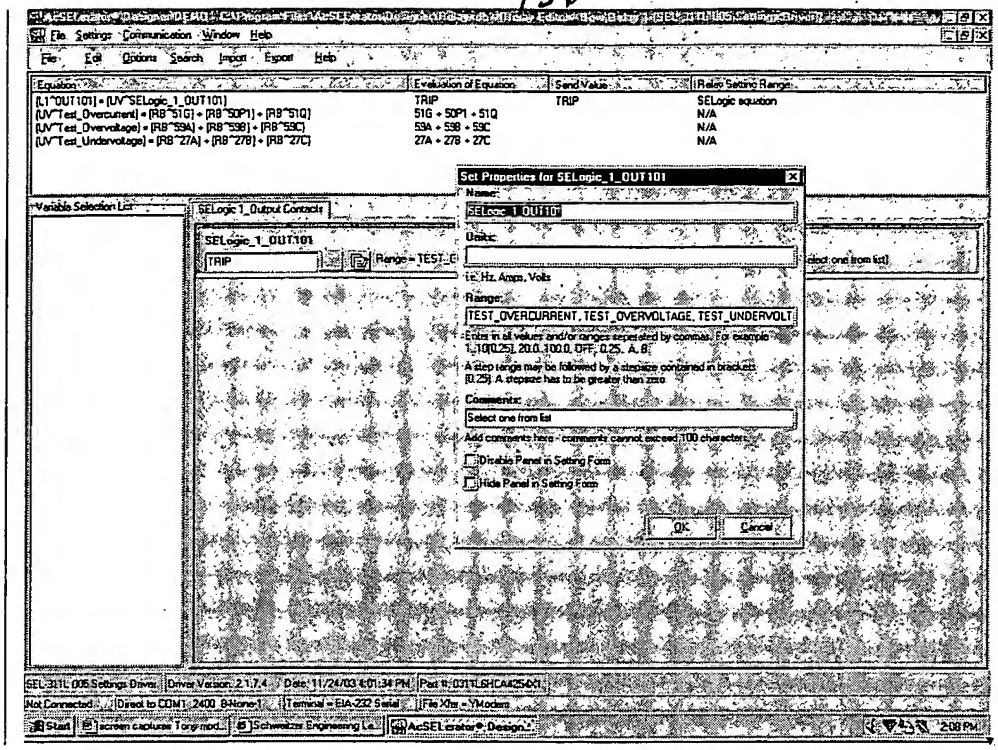

File Settings Communication Window Help
File Edit Options Search Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
(L1^OUT101) = [UV^SELogic_1_OUT101]
TRIP
TRIP
SELogic equation
(UV^Test_Overcurrent) = [RB^51G] + [RB^50P1] + [RB^51Q]
51G + 50P1 + 51Q
N/A
(UV^Test_Overvoltage) = [RB^59A] + [RB^59B] + [RB^59C]
59A + 59B + 59C
N/A
(UV^Test_Undervoltage) = [RB^27A] + [RB^27B] + [RB^27C]
27A + 27B + 27C
N/A
Set Properties for SELogic_1_OUT101
Name:
SELogic_1_OUT101
Units:
ie. Hz, Amps, Volts
Range:
TEST_OVERCURRENT, TEST_OVERVOLTAGE, TEST_UNDERVOLT
Enter in all values and/or ranges separated by commas. For example 1..10[0.25], 20.0..100.0, OFF, 0.25, A, B
A step range may be followed by a stepsize contained in brackets [0.25]. A stepsize has to be greater than zero
Comments:
Select one from list
Add comments here - comments cannot exceed 100 characters
Disable Panel in Setting Form
Hide Panel in Setting Form
OK
Cancel
Variable Selection List
SELogic 1_Output Contacts
SELogic_1_OUT101
TRIP
Range = TEST_O
elect one from list)
SEL-311L 005 Settings Drive
Driver Version: 2.1.7.4
Date: 11/24/03 6:01:34 PM
Part #: 031*LSHCAA254XX1
Not Connected
Direct to COM1, 2400, 8-None-1
Terminal - EIA-232 Serial
File Xfer - YModem
Start
screen captures Tony.mpd...
Schweitzer Engineering La...
AcSELerator Design...
2:08 PM

FIG. 9E

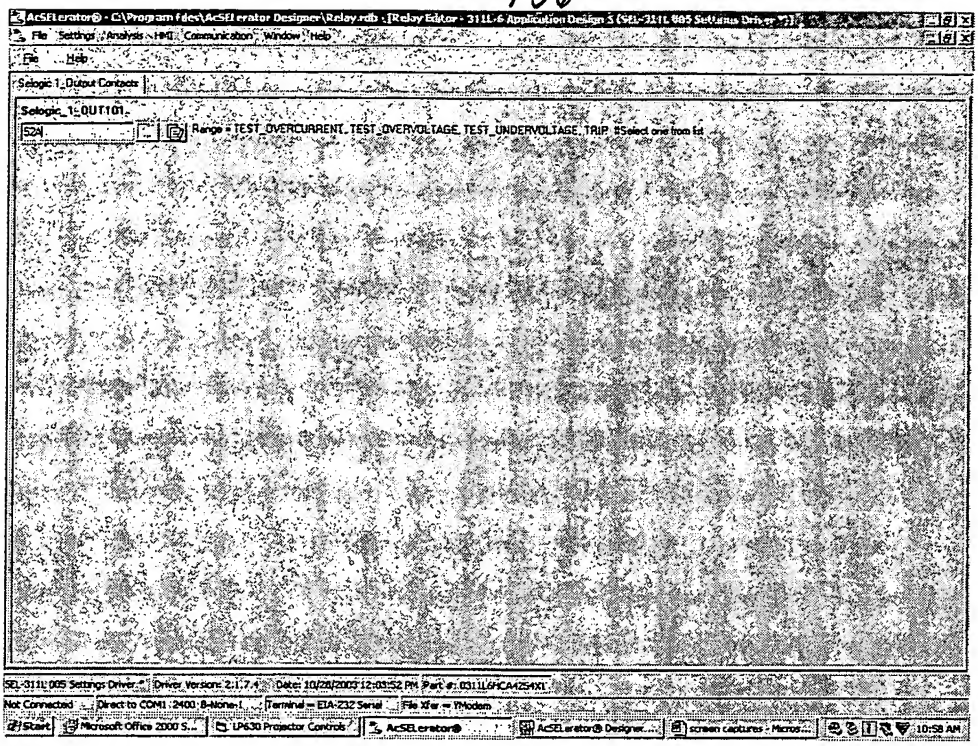

AcSELerator® - C:\Program Files\AcSELerator Designer\Relay.rdb - [Relay Editor - 311L-6 Application Design 3 (SEL-311L 005 Settings Driver)]
File Settings Analysis HMI Communication Window Help
File Help
Selogic 1 Output Contacts
Selogic_1_OUT101_
524
Range = TEST_OVERCURRENT, TEST_OVERVOLTAGE, TEST_UNDERVOLTAGE, TRIP #Select one from list
SEL-311L 005 Settings Driver
Driver Version: 2.1.7.4
Date: 10/28/2003 12:03:52 PM
Part #: 0311L6HCA425HXL
Not Connected
Direct to COM1 : 2400 : 8-None-1
Terminal = EIA-232 Serial
File Xfer = Modem
Start
Microsoft Office 2000 S...
LP630 Projector Controls
AcSELerator®
AcSELerator® Designer...
screen captures - Micros...
10:58 AM

FIG. 9F

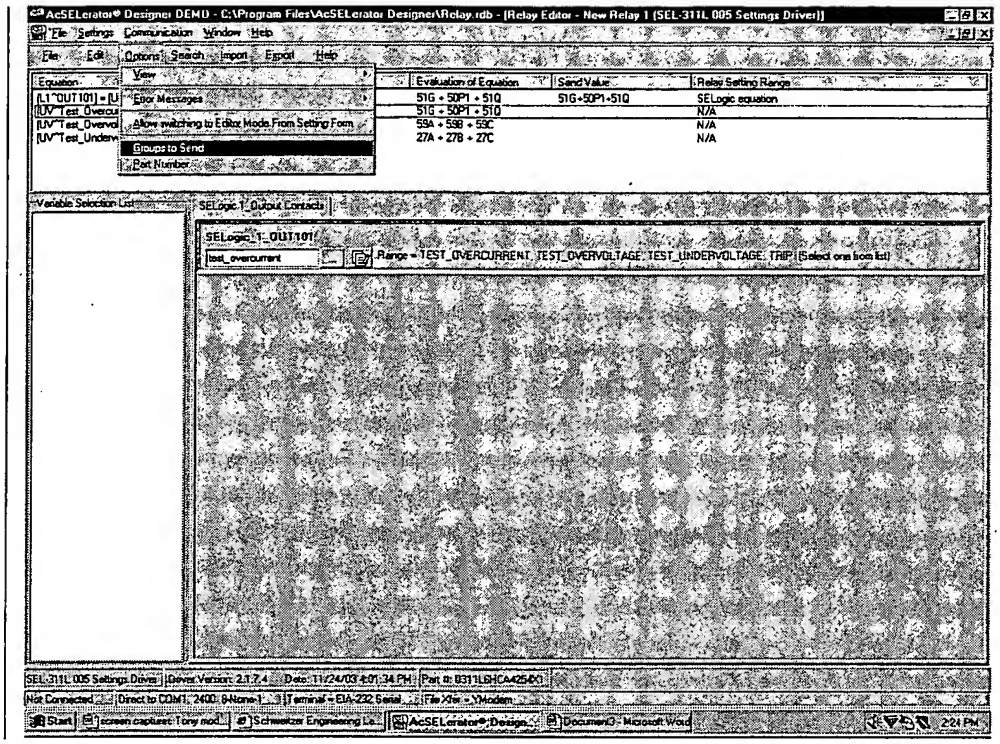

AcSELerator® Designer DEMO - C:\Program Files\AcSELerator Designer\Relay.rdb - [Relay Editor - New Relay 1 (SEL-311L 005 Settings Driver)]
File Settings Communication Window Help
File Edit Options Search Import Export Help
View
Equation
Error Messages
Allow switching to Editor Mode From Setting Form
Groups to Send
Part Number
Evaluation of Equation
Send Value
Relay Setting Range
51G + 50P1 + 51Q
51G+50P1+51Q
SELogic equation
51G + 50P1 + 51Q
N/A
59A + 59B + 59C
N/A
27A + 27B + 27C
N/A
Variable Selection List
SELogic 1 Output Contacts
SELogic_1_OUT101
test_overcurrent
Range = TEST_OVERCURRENT, TEST_OVERVOLTAGE, TEST_UNDERVOLTAGE, TRIP (Select one from list)
SEL-311L 005 Settings Drive
Not Connected
Direct to COM1, 2400, 8-None-1
Terminal - EIA-232 Serial
File Xfer - YModem
Start
AcSELerator® Design...
Document3 - Microsoft Word
2:21 PM

FIG. 10A

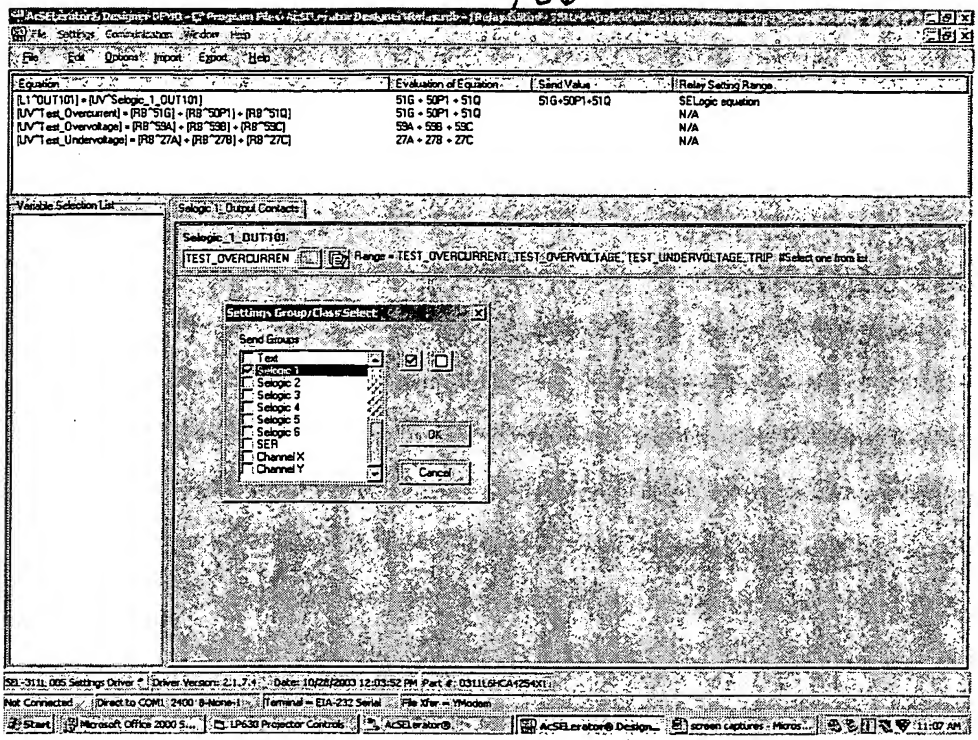

File Edit Options Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
[L1^OUT101] = [UV^Selogic_1_OUT101]
51G + 50P1 + 51Q
51G+50P1+51Q
SELogic equation
[UV^Test_Overcurrent] = [RB^51G] + [RB^50P1] + [RB^51Q]
51G + 50P1 + 51Q
N/A
[UV^Test_Overvoltage] = [RB^59A] + [RB^59B] + [RB^59C]
59A + 59B + 59C
N/A
[UV^Test_Undervoltage] = [RB^27A] + [RB^27B] + [RB^27C]
27A + 27B + 27C
N/A
Variable Selection List
Selogic 1 Output Contacts
Selogic_1_OUT101
TEST_OVERCURREN
Range = TEST_OVERCURRENT, TEST_OVERVOLTAGE, TEST_UNDERVOLTAGE, TRIP, #Select one from list
Settings Group/Class Select
Send Groups
Text
Selogic 1
Selogic 2
Selogic 3
Selogic 4
Selogic 5
Selogic 6
SER
Channel X
Channel Y
OK
Cancel
Not Connected
Direct to COM1 2400 8-None-1
Terminal = EIA-232 Serial
File Xfer = YModem
Start
Microsoft Office 2000 S...
LP530 Projector Controls
AcSELerator®
AcSELerator® Design...
screen captures - Micros...
11:07 AM

FIG. 10B

FIG. 11A

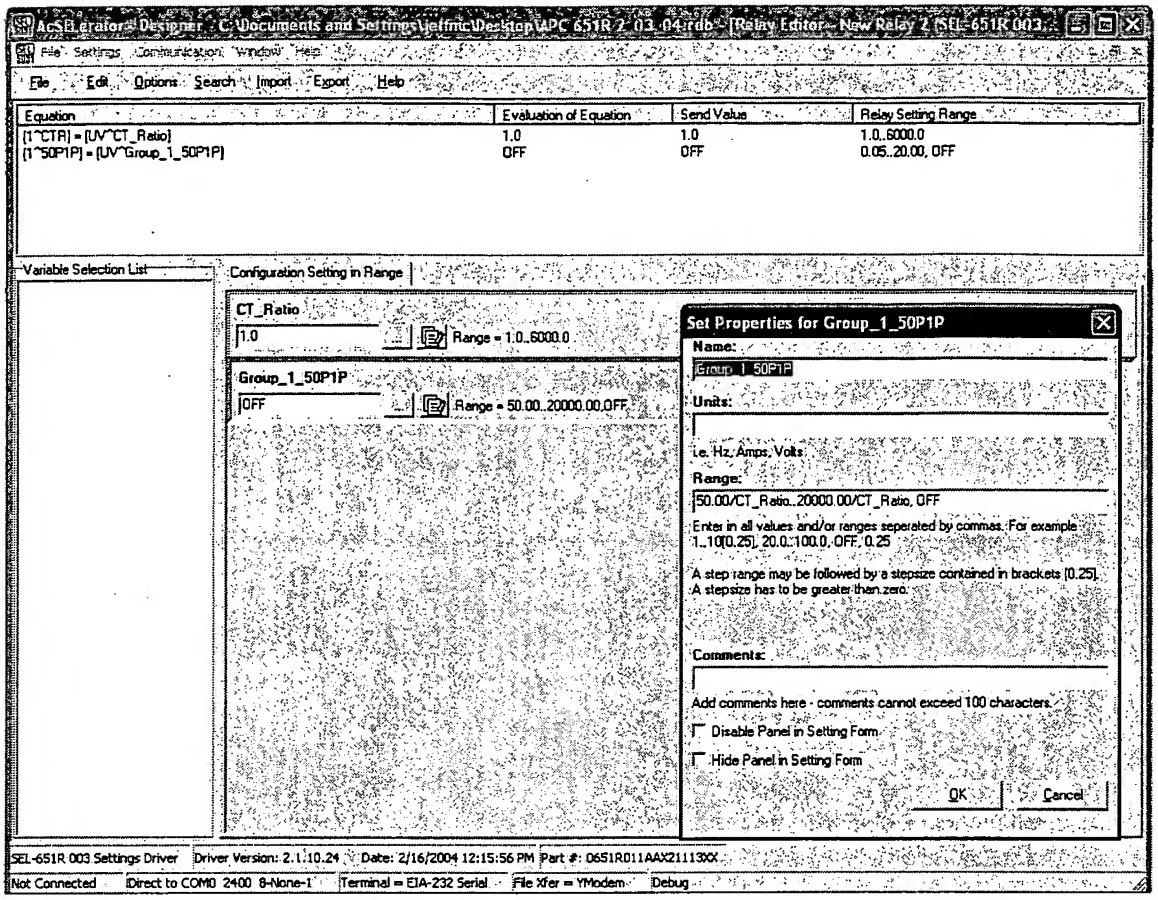
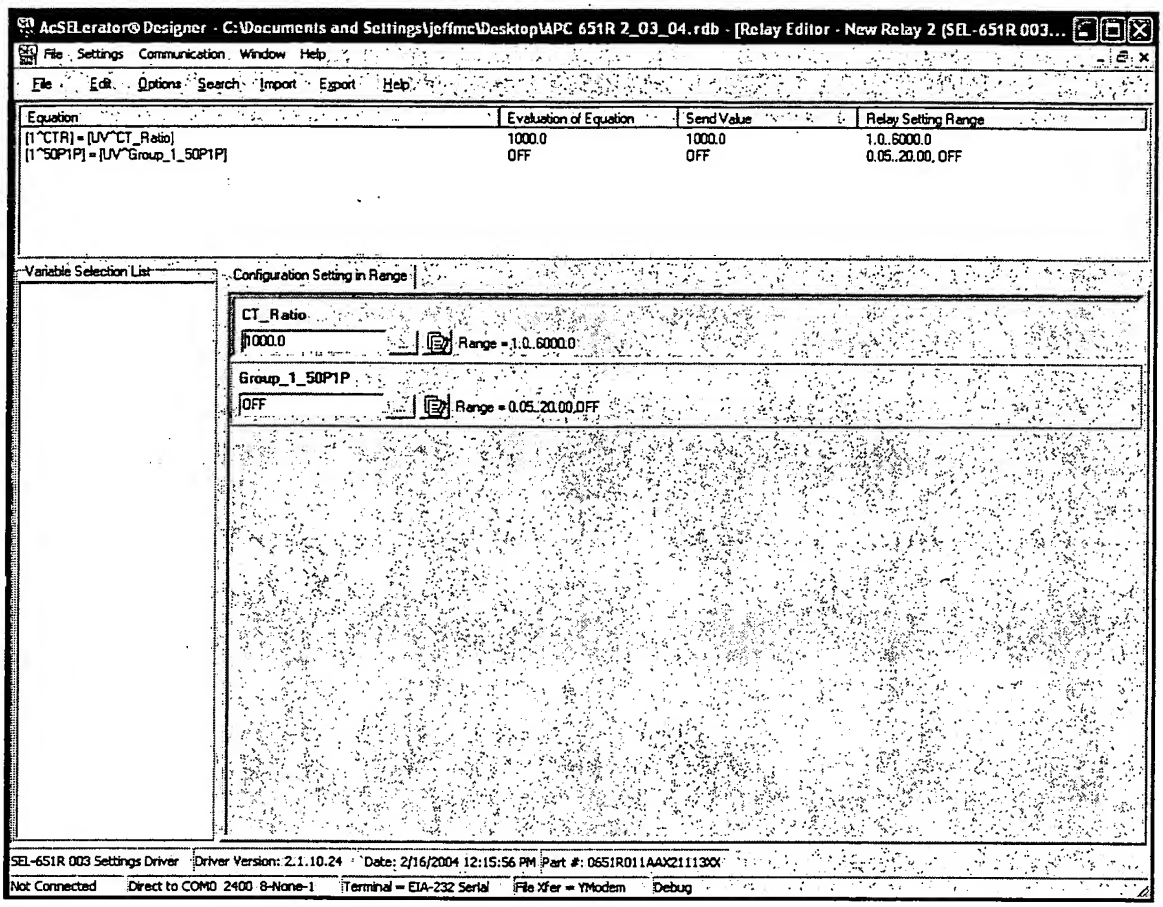

ACSELERATOR® Designer - C:\Documents and Settings\jeffmc\Desktop\APC 651R 2_03_04.rdb - [Relay Editor - New Relay 2 (SEL-651R 003)]
File Settings Communication Window Help
File Edit Options Search Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
[1^CTR] = [UV^CT_Ratio]
1.0
1.0
1.0..6000.0
[1^50P1P] = [UV^Group_1_50P1P]
OFF
OFF
0.05..20.00, OFF
Variable Selection List
Configuration Setting in Range
CT_Ratio
1.0
Range = 1.0..6000.0
Group_1_50P1P
OFF
Range = 50.00..20000.00,OFF
Set Properties for Group_1_50P1P
Name:
Group_1_50P1P
Units:
i.e. Hz, Amps, Volts
Range:
50.00/CT_Ratio..20000.00/CT_Ratio, OFF
Enter in all values and/or ranges seperated by commas. For example:
1..10[0.25], 20.0..100.0, OFF, 0.25
A step range may be followed by a stepsize contained in brackets [0.25].
A stepsize has to be greater than zero.
Comments:
Add comments here - comments cannot exceed 100 characters.
Disable Panel in Setting Form
Hide Panel in Setting Form
OK
Cancel
SEL-651R 003 Settings Driver
Driver Version: 2.1.10.24
Date: 2/16/2004 12:15:56 PM
Part #: 0651R011AAX21113XX
Not Connected
Direct to COM0 2400 8-None-1
Terminal = EIA-232 Serial
File Xfer = YModem
Debug

FIG. 11B


AcSELerator® Designer - C:\Documents and Settings\jeffmc\Desktop\APC 651R 2_03_04.rdb - [Relay Editor - New Relay 2 (SEL-651R 003...
File Settings Communication Window Help
File Edit Options Search Import Export Help
Equation
Evaluation of Equation
Send Value
Relay Setting Range
[1^CTR] = [UV^CT_Ratio]
1000.0
1000.0
1.0..6000.0
[1^50P1P] = [UV^Group_1_50P1P]
OFF
OFF
0.05..20.00, OFF
Variable Selection List
Configuration Setting in Range
CT_Ratio
1000.0
Range = 1.0..6000.0
Group_1_50P1P
OFF
Range = 0.05..20.00,OFF
SEL-651R 003 Settings Driver
Driver Version: 2.1.10.24
Date: 2/16/2004 12:15:56 PM
Part #: 0651R011AAX2111XX
Not Connected
Direct to COM0 2400 8-None-1
Terminal = EIA-232 Serial
File Xfer = YModem
Debug